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ABSTRACT

This study, authorized by the General Assembly of North Carolina, investigated current indicators of the state of youth physical fitness and the availability and utilization of programs to improve fitness. The study gathered testimony from physical fitness experts, educators, administrators, and medical personnel. The study found that youth are in extremely poor physical condition, and that North Carolina children in several grades exhibit higher levels of body fat, lower flexibility, and less aerobic conditioning than the national average. Recommendations for the General Assembly and the Department of Public Instruction call for daily, quality physical education and fitness experiences for all children; a grant program that would develop model healthful living programs; integration of healthful living into the end-of-grade testing program; and analysis of the professional development of healthful living teachers. Appendixes, which comprise more than half the document, contain: relevant portions of the authorizing legislation, membership of the legislative research commission, statistical data on physical fitness, excerpts from North Carolina's healthful living curriculum, the philosophy section of the Alamance County physical education program, a summary of a study titled "Youth Physical Activity and Fitness and the Impact on North Carolina Industry," and an executive summary of the North Carolina Children and Youth Fitness Study. Much of the data in the appendixes is presented in bargraphs. (JDD)

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LEGISLATIVE

RESEARCH COMMISSION

PHYSICAL FITNESS AMONG NORTH CAROLINA YOUTH

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REPORT TO THE 1993 GENERAL ASSEMBLY OF NORTH CAROLINA

S1034/938

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STATE OF NORTH CAROLINA

LEGISLATIVE RESEARCH COMMISSION

STATE LEGISLATIVE BUILDING

RALEIGH 27611

January 15, 1993

TO THE MEMBERS OF THE 1993 GENERAL ASSEMBLY:

The Legislative Research Commission herewith submits to you for your consideration its final report on physical fitness of youth. The report was prepared by the Legislative Research Commission's Committee on Physical Fitness Among North Carolina Youth pursuant to Section 2.1 (50) of Chapter 754 of the 1991 Session Laws.

Respectfully submitted.

Daniel T. Blue, Jr.
Speaker of the House

Henson P. Barnes
President Pro Tempore

Cochairmen
Legislative Research Commission

1991-1992

LEGISLATIVE RESEARCH COMMISSION

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PREFACE

The Legislative Research Commission, established by Article 6B of Chapter 120 of the General Statutes, is a general purpose study group. The Commission is cochaired by the Speaker of the House and the President Pro Tempore of the Senate and has five additional members appointed from each house of the General Assembly. Among the Commission's duties is that of making or causing to be made, upon the direction of the General Assembly, "such studies of and investigations into governmental agencies and institutions and matters of public policy as will aid the General Assembly in performing its duties in the most efficient and effective manner" (G.S. 120-30.17(1)).

At the direction of the 1991 General Assembly and the cochairs of the Legislative Research Commission, the Commission has undertaken studies of numerous subjects. These studies were grouped into broad categories and each member of the Commission was given responsibility for one category of study. The Cochairs of the Legislative Research Commission, under the authority of G.S. 120-30.10(b) and (c), appointed committees consisting of members of the General Assembly and the public to conduct the studies. Cochairs, one from each house of the General Assembly, were designated for each committee.

The study of physical fitness among North Carolina youth was authorized by Section 2.1 (50) of Chapter 754 of the 1991 Session Laws. That act states that the Commission may consider Senate Bill 15 determining the nature, scope and aspects of the study. Section 2 of Senate Bill 15 reads in part: "In conducting its study, the Commission shall investigate the most current indicators of the state of fitness and the availability and utilization of programs to improve fitness." The relevant portions of Chapter 754 and Senate Bill 15 are included in Appendix A. The Legislative Research Commission grouped this study in its Health and Human Resources area under the

direction of Senator Russell Walker. The Committee was chaired by Senator Ed Warren and Representative Bertha Merrill Holt. The full membership of the Committee is listed in Appendix B of this report. A notebook containing minutes and all information presented to the Committee is in the Legislative Library.

COMMITTEE PROCEEDINGS

The impetus for the study on physical fitness and youth originated from the release of a series of disturbing statistics. They were:

1. Physical fitness levels of youth have declined in the past several years;
2. 40% of youth age 5 - 8 already exhibit at least one heart disease risk factor (i.e. obesity, physical inactivity, elevated cholesterol., high blood pressure); and
3. Only one-third of children in grades one through six participate in daily physical education programs.

To investigate this alarming information, the Legislative Research Commission authorized the Committee on Physical Fitness and Youth with a twofold charge: investigate the most current indicators of the state of fitness; study the availability and utilization of programs to improve fitness. The Committee held its first meeting on January 28, 1992 and was organized under the leadership of Senator Ed Warren and Representative Bertha M. Holt. Subsequent meeting were held on March 9, 1992, October 29, 1992, and December 29, 1992.

For its first meeting, the Committee requested reports from two state agencies directly concerned with youth and its relationship to fitness. Ms. Shellie Y. Pfohl, Executive Director of the Governor's Council on Physical Fitness and Health reported that the physiological and psychological benefits of regular physical fitness are well documented. Coronary heart disease (CHD), osteoporosis, noninsulin-dependent diabetes mellitus, hypertension, obesity and mental health problems can be effectively prevented and managed with regular physical activity. Physically fit persons are also less likely to suffer from back injuries, colon cancer and stroke. Physical activity can increase the life span and quality of life for those who participate regularly.

Physical activity is especially important in preventing coronary heart disease, the leading cause of death and disability in the United States. Inactive people are twice as likely to develop CHD as people who are physically active. In addition, more North Carolinians are at risk for CHD due to physical inactivity than for any other single risk factor.

Evidence is mounting that suggests that even light to moderate physical activity can have significant health benefits. This is especially encouraging since light to moderate activity is more readily adopted and maintained.

Despite the obvious health benefits of regular physical activity, more than half of Americans remain inactive (perform less than 20 minutes of exercise 3 days per week regardless of intensity or dynamic movement of large muscle groups). North Carolina is no exception. The following are a few statistics related to physical activity and body weight for North Carolina adults (age 18 and over):

61% of North Carolinians are sedentary. (Perform less than 20 minutes of continuous exercise at least 3 times per week.)

58.1% of Americans are sedentary.

24.2% of North Carolinians are overweight (based on BMI) (BMI=body mass index. BMI is calculated by dividing weight in kilograms by the square of height in meters.)

22.6% of Americans are overweight (based on BMI).

The physical activity and fitness levels of children and adolescents in North Carolina are also cause for alarm. Information obtained by the North Carolina Youth Risk Behavior Survey (a questionnaire) points to the lack of adequate and appropriate physical activity during both school physical education class time and non-school time. It has been shown that physical activity for youth:

Counteracts major risk factors of heart disease (high blood pressure, obesity and sedentary lifestyles);

Improves muscular strength, flexibility, endurance;

Improves self-confidence, self-esteem, self-control;

Helps regulate weight control, tones bodies and improves body composition;

Helps children establish and strive for achievable, personal goals;

Helps students make appropriate decisions about their behavior and fitness;

Teaches children to follow rules and established procedures;

Develops movement skills;

Increases bone density;

Helps release tension and anxiety;

Strengthens peer relationships;

Reduces risk of depression; and

Promotes a positive, lifelong attitude toward physical activity.

Evidence is mounting which supports the positive relationship between physical activity and improved academic achievement in youth and adolescents. Furthermore, the negative relationship between increased television viewing time and poor physical fitness levels is also well researched. Correlations between physical fitness and substance abuse, school drop-out rates and other variables still require adequate research to determine their relationship.

The current state and national focus on escalating health care costs lends further support to promoting active lifestyles for our youth. Preventing or delaying diseases associated with "lifestyle" will not only decrease mortality but compress morbidity, saving health care dollars, as today's youth become tomorrow's work force. Current indicators point to the need to focus not on competitive sports but on lifetime fitness

activities such as swimming, walking, jogging, etc. Appendix C contains data provided by the Governor's Council on Physical Fitness and Health.

Dr. John Bennett, Chief Consultant, Healthful Living Section, Department of Public Instruction, also briefed the Committee on the Department of Public Instruction's perspective on youth fitness in North Carolina. The Healthful Living Section within DPI is the prime unit within the State education structure responsible for leadership in health and physical education. The unit exists to promote, encourage, assist, and monitor local public schools in fulfilling the state laws and policies for health education, physical education, AIDS education, and nutrition education. These components make up Health Living Education. Healthful Living Education is an intrinsic part of the Basic Education Program with the same legal status as science, mathematics, social studies, etc. (See Appendix D). In addition, the State Board of Education adopts the Standard Course of Study, required for all schools to provide, and Healthful Living Education is specifically included as a required subject matter area for all students, kindergarten through eighth grade, and is also a high school graduation requirement.

Dr. Bennett noted that the purpose of the Basic Education Plan is to assure that every child would be exposed to the same curriculum. However many schools cannot afford a professional P.E. teacher; therefore, the classroom teacher must provide the P.E. instruction. The average training for the classroom teacher is one course. This is in a time when studies show that the current student is less fit than any prior cohort. Data also shows that healthy students do much better in other subjects and stay in school longer. Since local school systems determine and prioritize their needs, there is a great need to let them know the importance of P.E. Modeling by teachers and parents is also very important.

The second meeting, March 9, 1992, was devoted to receiving testimony related to that part of the charge that required the Committee to investigate the "availability and utilization of programs to improve fitness." To hear about innovative public school programs in other states it invited Ms. Beth Kirkpatrick, a middle school health and physical fitness teacher from Bettendorf, Iowa. Ms. Kirkpatrick has been a presenter at over 200 conferences, workshops and conventions nationwide, has been featured in NEWSWEEK and LIFE magazines, and she was recognized by the National Association for Sport and Physical Education as one of the top six physical educators in the country. She entertained and educated those present by describing how she combines the use of modern technology, the teaching of nutrition and biology (a student must learn the function of all the body parts and the entire circulatory system), and respect for the environment in her physical fitness training for her students. Classical music is used for relaxation. Her bag of props which she uses in her classes contained computerized athletic shoes, a heart and brain monitor, a blood pressure cuff, and three referee shirts with the slogans "I am honest," I am fair," "I am assertive" written on the back of each.

The curriculum at her school is entitled "Lifestyle Education." She does not believe in competitive sports until eighth grade. A system she developed, called the "Ultra Shuffle," rotates every child in a class from team to team.

She has gotten funds for her equipment from industry. Her theory was that: "If you have a strong enough conviction and it is working, and you can show accountability and responsibility, you can make it happen." She also believes that self esteem is a key factor to happiness and success in life. If children are taught early in life to train to play, and the training is fun (we must learn to use the technology available to us), a generation of much happier, healthier adults will be produced.

Mr. Alexander French, an administrator in the Alamance County school system spoke to the Committee about his county's model physical fitness curriculum. (See Appendix E). The Alamance County system has developed its own tests and does not use the "President's Physical Fitness" test. Basic skills emphasized include body awareness, locomotor and rhythmic skills, extended radius-eye coordination, hand-eye coordination, and self-control.

In response to questions from committee members, Mr. French listed shortage of P.E. teachers and funds as problems in their ability to offer physical education to students on a daily basis. He said that the health curriculum is integrated into types of physical education activities. The classroom teachers and outside speakers assist in supplementing the P.E. teacher's programs. P.E. is required through ninth grade, but only one unit is required from tenth through twelfth grade.

Dr. Ned Yellig, an internist, briefed the Committee on cardiovascular disease and youth. Research shows that by age three a child will have lipid deposits in artery walls. Fifty percent of 5000 school children in a national study had cholesterol levels of 180/100 ml---almost adult levels, and twenty-four percent had levels over 200.

Dr. Yellig suggested that the Legislature require all students to take a "vaccination" against arteriosclerosis which would contain the following ingredients: 1) daily physical education, 2) knowledge and information about prevention, 3) fall and spring fitness evaluations, 4) BP cholesterol screening, 5) worksite wellness programs, and 6) heart-healthy lunch choices. He indicated that the Wake County Medical Society has funded a model school which focuses on these ingredients.

Dr. Robert McMurray of the U.N.C. Department of Physical Education presented findings from the North Carolina Cardiovascular Health in Children Study. This is an ongoing one million dollar research project on the cardiovascular health of North Carolina children. The study involved twenty schools--1/3 from the Coastal Plains, 1/3

from the Piedmont and 1/3 from the Mountain area of the State. The schools were 1/2 rural, 1/2 urban, and all racially mixed. It found that N.C. youngsters scored 12 to 15 percent below the national average on heart-lung fitness and were twice as likely to be obese. He indicated that there was a "cardiac belt" running from Virginia, through part of the Piedmont and the Coastal Plain of N.C. all the way down to Florida. The children in this area of the State were found to be less fit. Perhaps one of the more startling facts he presented was that the study found that 30 percent of third graders smoked. His information corresponded closely with that of Dr. Yellig.

One of the major issues related to youth physical fitness is the potential impact of youth physical activity to North Carolina industry. Therefore the Committee received a report from the Association for Fitness in Business. (See Appendix F.)

One of the key benefits to industry from youth physical activity are reduced health care costs and increased productivity. If one heart by-pass surgery is prevented, the $30,000 saved could easily pay a P.E. teacher's salary. Youth, family, community schools, government and industry all share responsibility for tomorrow's workforce.

One of the major tasks assigned to the Committee was to "investigate the most current indicators of the state of fitness" of North Carolina's youth. Obviously this research would be beyond the ability of the Committee under normal circumstances but fortunately the Governor's Council on Physical Fitness and Health had commissioned such a study through the Department of Physical Education, North Carolina State University.

Dr. Angela Lumpkin, Professor and P.E. Department Head, NCSU, presented to the Committee the findings from the study. Dr. Lumpkin stated that the purpose of the study was designed to provide physical educators, school administrators, public officials and legislators with "hard facts" needed to improve the quality and quantity of physical education training received by our children. The study was designed to 1) assess the

fitness levels of youth in grades 1, 3, 6, and 9; 2) describe their patterns of participation in physical activity; and 3) determine the factors affecting their fitness.

In relation to the study results, Dr. Lumpkin informed the Committee that there are six myths about children's physical fitness:

1. Children are physically fit.
2. There is plenty of physical education in schools.
3. Physical education is not very important.
4. Children get plenty of exercise outside of school.
5. There are not enough resources for everything.
6. There is nothing I can do.

The conclusions from the study were not encouraging. On the national level there is overwhelming consensus that our youth are in extremely poor physical condition. The results of the North Carolina Children and Youth Fitness Study suggest that our children exhibit equally poor, and in many instances lesser physical fitness levels than the children in the national study. In fact, the data shows that North Carolina boys and girls in several grades exhibit significantly higher levels of body fat, lower flexibility, and less aerobic conditioning. Since parents seldom exercise with their children, schools must provide quality physical education programs which will improve the physical fitness levels of North Carolina youth. Data from the study is contained in Appendix G.

FINDINGS AND RECOMMENDATIONS

RECOMMENDATION ONE

The 1993 General Assembly should reauthorize the Legislative Research Commission to study the issue of physical fitness among North Carolina Youth. (See Appendix H).

FINDINGS AND CONCLUSIONS

The Committee was given a double charge by the LRC. It was to investigate the most current indicators of the state of fitness and the availability and utilization of programs to improve fitness. The first part of the charge has been executed because of the availability of current North Carolina studies providing specific data related to North Carolina youth. This information is contained in the "Proceedings" and several "appendices." This evidence supports the positive relationship between physical activity and improved school performance and the prevention and delay of diseases associated with lifestyle.

The effort to execute the second part of the charge related to the availability and utilization of programs to improve fitness has barely begun. Effective programs to promote physical activity and fitness in youth do exist in some rare instances. A future Committee needs to be available to promote the importance of having a good P.E. program in every school as one alternative to the high costs of curative medicine.

RECOMMENDATION TWO

That North Carolina General Statute 115C-300(e) "Alternative Class Sizes" be amended to make Physical Education class size consistent with other subjects by grade level. (See Appendix I).

FINDINGS AND CONCLUSIONS

Testimony was presented before the Committee that quality of instruction in physical education classes was severely hampered by abuse in the "loading" of physical education classes. Inordinately large class sizes in physical education also contribute to unsafe conditions in some instances.

Recent amendments to the School Improvement and Accountability Act has given waiver of class-size regulation authority to local school-based committees. With this new waiver authority local committees will be able to waive regulations if the proposed amendment is enacted.

RECOMMENDATION THREE

The North Carolina General Assembly should create a grant program that would develop model Community/School-Linked Healthful Living Programs. These grants administered by the Department of Public Instruction to local school units would be used to promote comprehensive community-based healthful living for children and their families.

FINDINGS AND CONCLUSIONS

The need for innovative projects that break traditional boundaries of thinking and practice regarding the healthful development of children and their families is of paramount importance. Ample proof has been given the Committee to exhibit the rapidly declining state of our children's health and physical fitness. Without access to quality, sustained physical fitness, health instruction and engaging recreational opportunities the decline in our states' physical well-being is certain to continue.

There is a need to enhance local efforts that effectively integrate healthful living education, classroom instruction and the need for community recreational opportunities

for children and their families. The Committee heard from a variety of experts that appropriate parental modeling and involvement in the fitness of their children is of critical importance. The best opportunity for parents to become involved in their children's physical well-being is through participation in community recreational opportunities and involvement in supporting local school healthful living educational efforts.

Few local North Carolina communities have approached community healthful living from a holistic, collaborative and integrated approach, making optimal use of existing resources. The National Health/Education Consortium points out that ..."Collaboration represents a fundamental change in the way education and health systems think about, identify and meet the needs of children, youth and families. It means looking at families holistically - seeing a child with both strengths and needs who is a part of a family and lives within a community."

Human and facility resources with potential to encourage developmentally appropriate integrated fitness instruction and recreation for children and their families are present in most communities in our state. A limited investment through a state grant program dedicated to encouraging full collaboration and utilization of existing resources should provide benefits far beyond its minimal cost.

RECOMMENDATION FOUR

The General Assembly should continue its support of the Basic Education Program in order to move toward daily, quality physical education and fitness experiences for all children.

FINDINGS AND CONCLUSIONS

The Committee found that the physical fitness of American children, and North Carolina children in particular, is alarmingly poor. On the national level there is overwhelming evidence that our youth are in extremely poor physical condition. The results of the North Carolina Children and Youth Fitness Study reviewed by the Committee suggests that our children exhibit equally poor, and in many instances, lesser physical fitness levels than the children in the national study. In fact, the data shows that North Carolina boys and girls in several grades exhibit significantly higher levels of body fat, lower flexibility, and less aerobic conditioning.

The Committee was presented research that indicated: 1. Physical fitness levels of youth have declined seriously in recent years; 2. Exercise habits established in childhood may help in maintaining a physically active lifestyle throughout adulthood; and 3. Only one-third of children in grades one through six participate in daily physical education programs.

A report from the American Alliance for Health, Physical Education, Recreation and Dance was presented that illustrated that children derived specific physical, mental, psychological and social benefits from regular, quality physical fitness instruction.

Physical benefits include: 1. The reduction of heart disease; 2. Improved muscular strength, flexibility, muscular endurance, body composition and cardiovascular endurance; 3. Increased bone density, reducing the risk of osteoporosis; and 4. Improved motor skills to promote health and fitness throughout life.

Mental benefits include: 1. Improved academic performance; 2. Increased interest in learning; 3. Improved judgement; and 4. Encouraged self-discipline and goal setting.

Psychological and social benefits include: 1. Improved self-confidence and self-esteem; 2. Provides an outlet for stress; 3. Strengthens positive peer relationships; 4. Reduces the risk of depression; and 5. Promotes healthier lifestyles.

North Carolina General Statutes 115C-81(a1) provides that the State shall "...provide every student in the State equal access to a Basic Education Program." The statute continues, listing physical education, personal health and safety as instructional components to be offered. The Committee heard testimony from a variety of sources that Healthful Living Education is an intrinsic part of the Basic Education Program and is specifically included as a required subject matter area for all students, kindergarten through eighth grade, as well as a high school graduation requirement.

The Committee also heard however, that incomplete implementation of the BEP has hampered local school efforts to provide quality, regular physical fitness instruction, and that many children do not experience regular physical fitness instruction. The shortage of Physical Education funded positions poses a major obstacle in efforts to build healthy adults. Our state's schools must exhibit that physical fitness is not something that is just desirable - it is an essential and integral part of a healthy life.

RECOMMENDATION FIVE

The Department of Public Instruction shall, in collaboration with the University System of North Carolina and NCAHPERD, conduct a comprehensive analysis of the current condition of pre-service and ongoing professional development of healthful living teachers, with specific recommendations for reform and resource needs. The Department shall involve local classroom teachers in their deliberations.

Reports of the progress of this study, as well as reform efforts should be reported back to appropriate groups within the North Carolina General Assembly during the 1993-1995 biennium.

Topics included in that study shall be: 1. The creation of an instructional manual for teachers which explains how to effectively implement the activities in the Teacher Handbook; 2. An analysis of renewal credits obtained by healthful living teachers with

recommendations for improved focus on quality professional development in the primary instruction area; 3. Specific activities that successfully promote local LEA support of high quality ongoing professional development for healthful living teachers; 4. The development of uniform and high quality standards and competencies for pre-service healthful living students. It shall also investigate the need in each school district for a central level supervisor qualified in physical education to oversee the physical education curriculum and who has no other responsibilities; 5. Methods to integrate healthful living instruction into regular classroom teacher practices. (See Appendix K).

The staff of the Committee shall forward a copy of the LRC Report on Physical Fitness among North Carolina Youth to the Superintendent of Public Instruction, President of the University of North Carolina System, and President and Executive Director of NCAHPERD. Committee staff shall also forward a copy of the report to the North Carolina School Boards Association for distribution to its membership.

FINDINGS AND CONCLUSIONS

The Committee heard testimony from the the North Carolina Youth Fitness Coalition made up of representatives from organizations and agencies throughout North Carolina that have the advocacy of health and well being of youth as a major objective. More than 30 agencies are represented by the coalition.

Among the more important recommendations by the Coalition was a series of requests related to the pre-service and ongoing professional development of healthful living teachers reflected in the "Topics for Study" listed in Recommendation Three.

Recent local school reform developments including school-based management have illustrated that the most important unit of school reform is the school "building". The teachers, administrators and parents served by those professionals are the catalyst for local school improvement.

It has become clear that local school improvement efforts can not be sustained without ongoing, high quality professional development. Professional development that focuses on the changing role of teachers in instructional delivery, curriculum development, and an increased responsibility for the well-being of the whole child.

Equally important is the need for focused, rigorous pre-service training that reflects the rapidly changing role and demands of professional healthful living teachers.

RECOMMENDATION SIX

The Department of Public Instruction, with assistance from the University of North Carolina, shall develop comprehensive recommendations for the integration of Healthful Living into the end-of-grade testing program. Fitness assessments, cognitive measures and exit physical competencies should be considered in the development of recommendations.

FINDINGS AND CONCLUSIONS

There is currently a widespread desire for results and accountability in all curriculum areas. Although the state has made considerable efforts in assessing student performance, the current status of Healthful Living in the states' testing program is not clear. The situation in Physical Fitness is especially complicated, since, with the exception of specific studies, it has not been traditionally measured in a comprehensive, reliable and valid fashion.

As educators begin to fully appreciate and recognize the full developmental intelligences of children there will be an increasing need to expand our traditional thinking of what achievement we measure and how. Initial steps to investigate how to fully integrate Healthful Living assessment into our states' accountability efforts must be taken.

APPENDIX A

CHAPTER 754
SENATE BILL 917

AN ACT TO AUTHORIZE STUDIES BY THE LEGISLATIVE RESEARCH COMMISSION, TO CREATE AND CONTINUE VARIOUS COMMITTEES AND COMMISSIONS, TO MAKE APPROPRIATIONS THEREFOR, TO DIRECT VARIOUS STATE AGENCIES TO STUDY SPECIFIED ISSUES, AND TO MAKE OTHER AMENDMENTS TO THE LAW.

PART I.-----TITLE

Section 1. This act shall be known as "The Studies Act of 1991."

. . . . .

PART II.-----LEGISLATIVE RESEARCH COMMISSION

Sec. 2.1. The Legislative Research Commission may study the topics listed below. Listed with each topic is the 1991 bill or resolution that originally proposed the issue or study and the name of the sponsor. The Commission may consider the original bill or resolution in determining the nature, scope, and aspects of the study. The topics are:

. . . . .

(50) Physical Fitness Among North Carolina Youth (S.B. 15 - Tally).

. . . . .

Sec. 2.8. Reporting Dates. For each of the topics the Legislative Research Commission decides to study under this act or pursuant to G.S. 120-30.17(1), the Commission may report its findings, together with any recommended legislation, to the 1992 Regular Session of the 1991 General Assembly or the 1993 General Assembly, or both.

Sec. 2.9. Bills and Resolution References. The listing of the original bill or resolution in this Part is for reference purposes only and shall not be deemed to have incorporated by reference any of the substantive provisions contained in the original bill or resolution.

Sec. 2.10. Funding. From the funds available to the General Assembly, the Legislative Services Commission may allocate additional monies to fund the work of the Legislative Research Commission.

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1991

S 1

SENATE BILL 15
Proposed Committee Substitute S1.-PCSLN-016
ATTENTION: LINE NUMBERS MAY CHANGE AFTER ADOPTION

Short Title: Youth Fitness Study. (Public)

Sponsors:

Referred to: Human Resources.

February 6, 1991

A BILL TO BE ENTITLED

AN ACT TO AUTHORIZE THE LEGISLATIVE RESEARCH COMMISSION TO STUDY THE ISSUE OF PHYSICAL FITNESS AMONG NORTH CAROLINA YOUTH.

Whereas, the physical fitness levels of youth have not improved and, in most cases, have declined in the past several years; and

Whereas, exercise habits established in childhood may help in maintaining a physically active lifestyle throughout adolescence and adulthood; and

Whereas, only one-third of children in grades one through six participate in daily physical education programs, and

Whereas, 15%-25% of youth are obese; and

Whereas, youth score poorly on cardio-respiratory endurance tests; Now, therefore,

The General Assembly of North Carolina enacts:

Section 1. The Legislative Research Commission may study the issue of physical fitness among North Carolina's youth. In conducting its study, the Commission shall investigate the most current indicators of the state of fitness and the availability and utilization of programs to improve fitness.

Sec. 2. The Commission may report is findings and recommendations to the 1993 General Assembly, and may make an interim report to the 1992 Session of the 1991 General Assembly.

Sec. 3. This act is effective upon ratification.

APPENDIX B

MEMBERSHIP OF LRC COMMITTEE ON PHYSICAL FITNESS AMONG NORTH CAROLINA YOUTH

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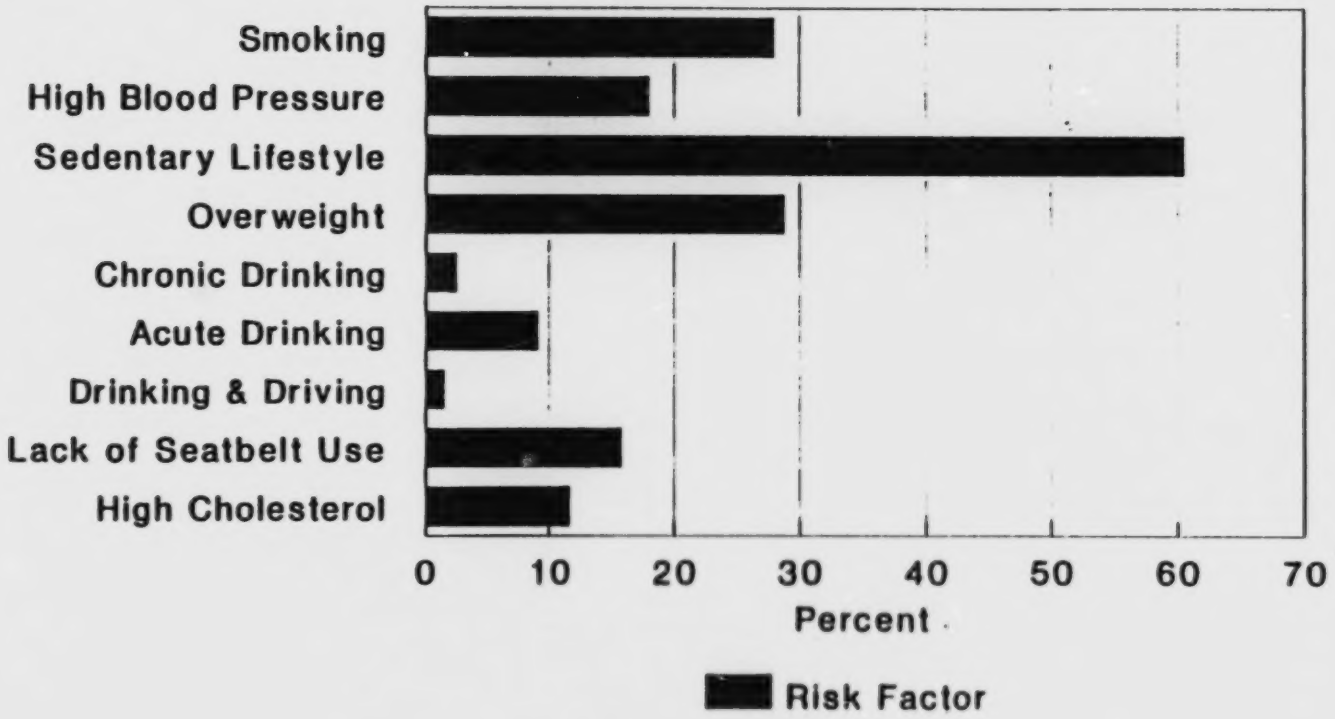
Risk Factor Prevalence
North Carolina, 1990



Source: Behavioral Risk Factor Surveillance System

SIGNIFICANT STATISTICS

NATIONAL DATA –

A. National Children and Youth Fitness Studies I and II[18]

NCYFS I - Grades 5-12
NCYFS II - Grades 1-4

- Sixty-six percent of youth aged 10-17 engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

- In 1984-86, 36% of 1st through 12th grade children and youth participated in daily school physical education.

- Enrollment in physical education falls off rapidly as students grow older, approaching 50 percent in grades 11 and 12.

- Only 47 percent of class time is spent on lifetime physical activities. Lifetime activities generally require only one or two people and may readily be carried into adulthood.

- Almost 84% of children participate in physical activity through at least one community organization.

- Fewer than 30% of mothers and fathers of children in grades 1-4 participate in moderate to vigorous exercise three days a week.

- Children who watch greater amounts of television tend to have lower activity levels and are less likely to participate in organized sports or to engage in physical activity through community organizations.

- Physical education teachers of younger students tend to rely heavily on relays and informal games, such as dodgeball and kickball. Many of these activities promote neither fitness nor skill development.

- Teachers of older students continue to rely heavily on competitive sports and on other activities that cannot readily be done by adults.

- Insufficient investment is being made in the development of skills and attitudes needed for active lifestyles as adults.

- The physical activity patterns of children are significantly related to their cardiorespiratory endurance and body composition. Physically fit children:

  -watch less television
  -participate in more community activities
  -receive more of their physical education instruction from a specialist

- The body fatness of 6-9 year olds has increased significantly in the past 20 years. (NCYFS results compared with National Center for Health Statistics in 1963-65.)

B. Chrysler Fund-AAU Physical Fitness Study 1980-1989[19]

- Children of all ages show gains in strength and endurance of abdominal muscles and hip flexors, as assessed by situps.

- Improvement in back and hamstring flexibility was shown in sit and reach tests.

- Cardio-respiratory endurance declined in both boys and girls.

- There has been a slow increase in body weight as children get older, beyond what would be expected based on gains in height.

- The proportion of children reaching or exceeding MINIMAL standards on all four required tests (endurance run, pullup or flexed arm hang, sit and reach, situp) declined over the decade from 43% to 32%.

C. Other Data

- Children of active mothers are twice as likely to be active than children of inactive mothers.[20]

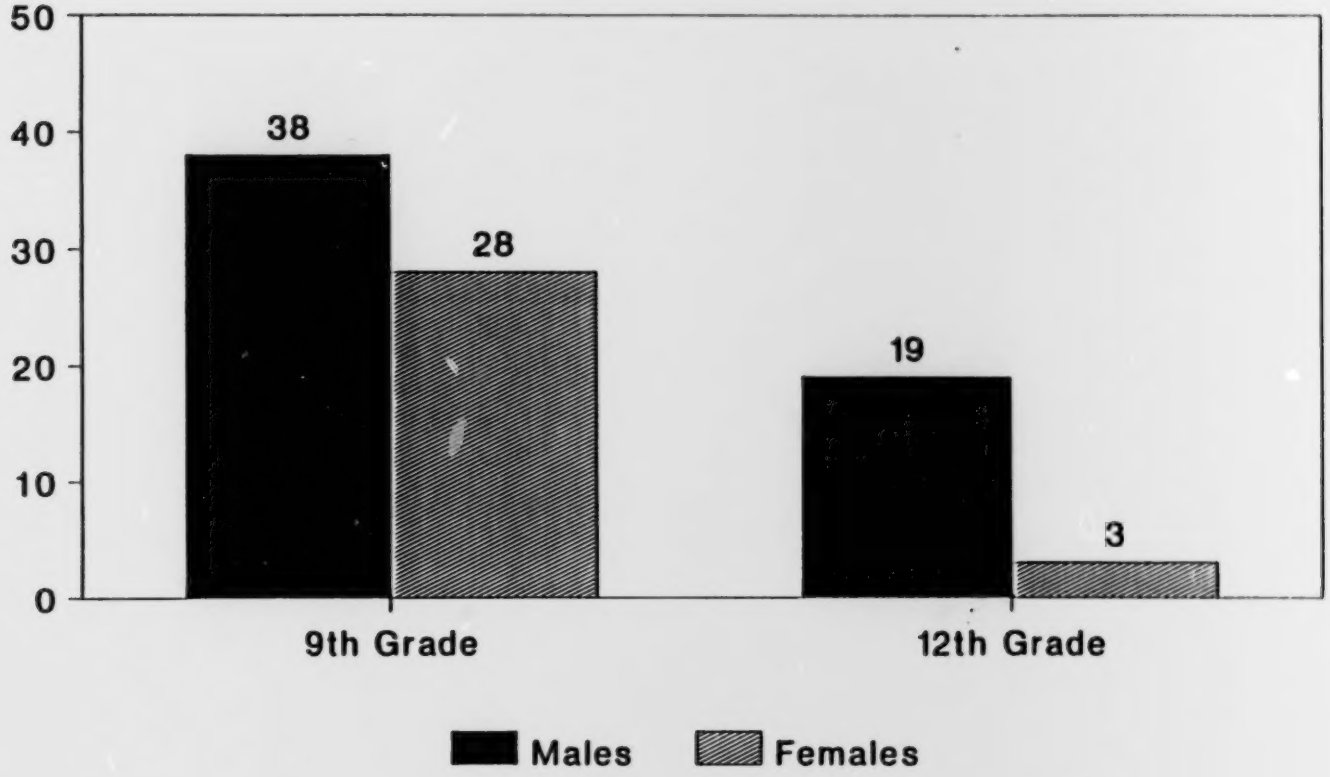
- Children of active fathers are 3.5 times more likely to be active than youngsters of inactive fathers.[20]

- Each hourly increment of television viewing by adolescents was associated with a 2% increase in the prevalence of obesity.[17]

- Increased physical fitness levels are positively correlated with reading and math performance[12] and higher overall grade point averages.[13]

Physical Activity and Fitness

Exercise >20 min. in P.E. Class

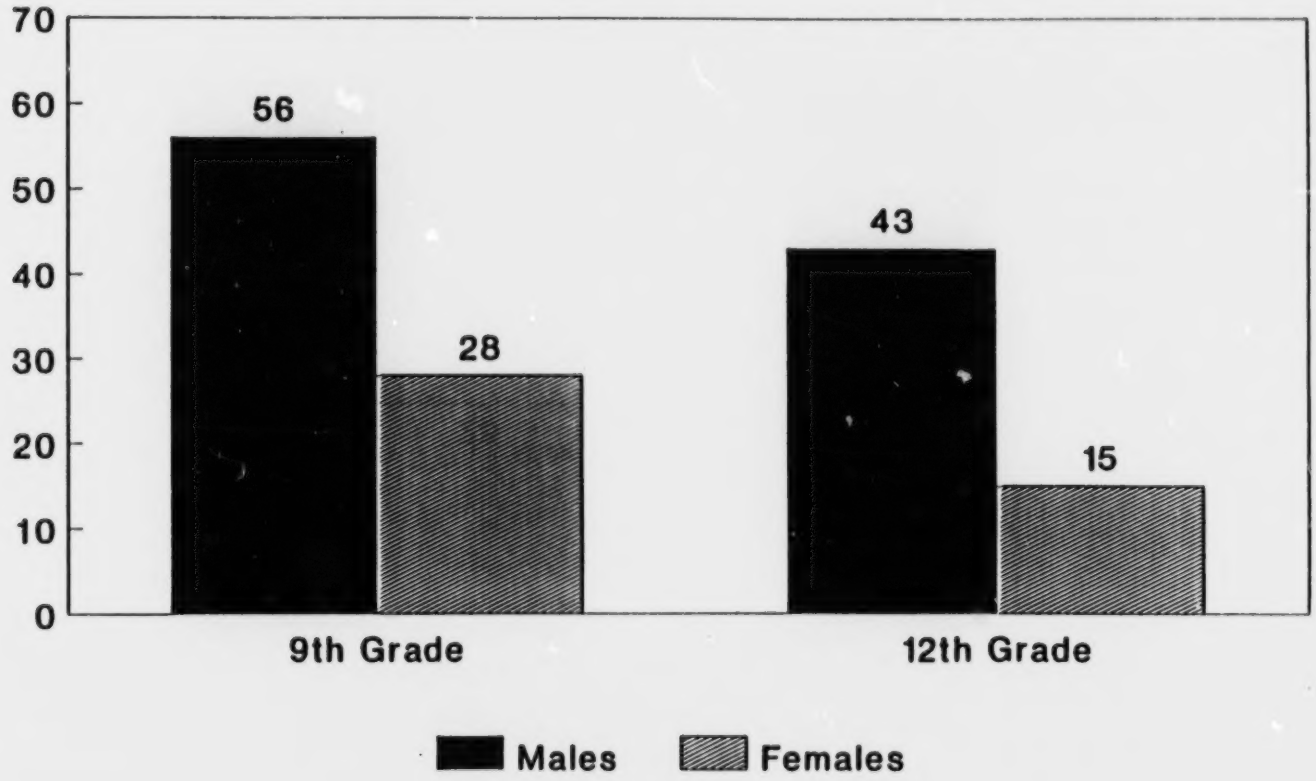


Source: Youth Risk Behavior Survey, 1990

C-5

Physical Activity and Fitness

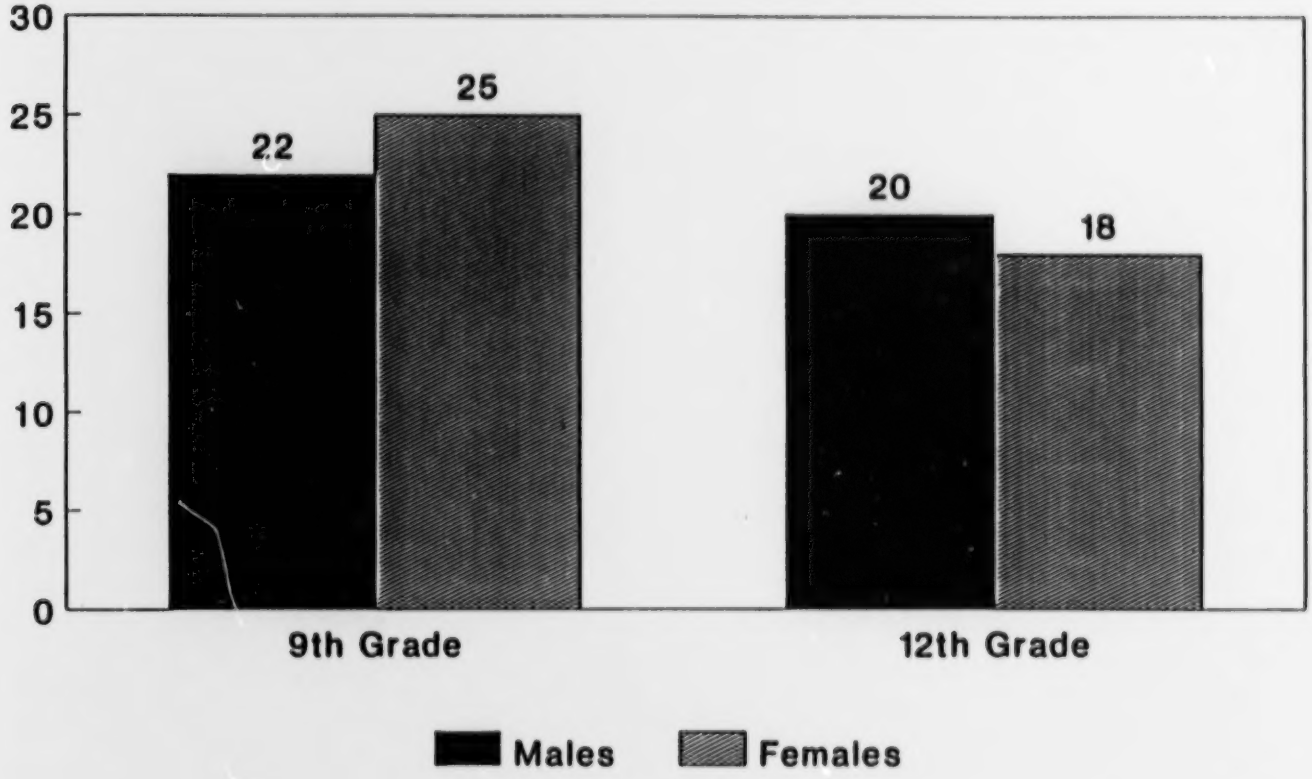
Exercise ›6 of last 14 days



Source: Youth Risk Behavior Survey, 1990

Physical Activity and Fitness

4+ hrs./day TV/Video



Source: Youth Risk Behavior Survey, 1990

North Carolina Schools
% Using Certified Physical Educators

Source: 1987 P.E. Program Report

EXCERPTS FROM THE **BASIC EDUCATION PROGRAM FOR NORTH CAROLINA'S PUBLIC SCHOOLS**, Revised January, 1986. North Carolina State Board of Education, Raleigh, NC. Originally proposed to the North Carolina General Assembly October 15, 1984.

HEALTHFUL LIVING (K-3)

The important elements of health education at this level focus on: (1) learning about our own bodies-what the parts are, what they do, and why our bodies are important to us; (2) becoming aware of feelings, what they are called, and accepting their existence; (3) understanding relationships with other people, especially families and classmates; (4) comprehending what illness is and understanding that illness has causes; (5) learning the importance of nutrition, rest, exercise, sleep, disease-causing organisms; (6) assuming a portion of the responsibility for one's own health and safety; and (7) recognizing that healthful living contributes to a satisfying life.

The physical education program for students at the K-3 level emphasizes fundamental motor skills, recreational dance, gymnastics, games, and fitness activities.

Safety education at this age emphasizes fire safety and other rules and regulations necessary for their safety of others. Lessons include traffic, home, school, work, and recreational safety.

HEALTHFUL LIVING (4-6)

The principal orientations of health education in the intermediate grades center around: (1) learning how the body and its parts work: (2) understanding how the body changes through growth and development; (3) comprehending that the development and functioning of the body and mind can be influenced by personal health practices, environment, taking drugs, and diseases; (4) practicing some of the elements of health-related decision-making; (5) recognizing the responsibilities that each of us has in maintaining our own health and the health of the community in which we live; (6) learning to evaluate health-related information, products and services; and (7) developing an awareness of the human life cycle and its relationship to our health and physical growth and development.

The physical education program for students at the 4-6 level emphasizes exposure to the following activities:

Fundamental Motor Skills
Recreational Dance
Gymnastics
Games
Fitness Activities
Recreational Activities

A complete safety education program for intermediate grades is developed around activities in the home, in traffic, at school, and during leisure time. Avoiding falls, preventing fires, observing safety rules during storms, obeying traffic rules, riding school buses, and administering first aid are emphasized at this age.

HEALTHFUL LIVING (7-8)

Health education at the middle school and junior high levels emphasizes: (1) accepting personal responsibility for health-related decisions and their consequences; (2) learning skills that promote healthy relationships with others: (3) maintaining a positive self-image during adolescence; (4) understanding the nature of and reasons for the rapid physical and sexual changes taking place: (5) learning first aid skills; (6) understanding potential health-related problems of this age-venereal disease, drug, alcohol and tobacco abuse, emotional stress, pregnancy, nutrition, sexual behavior; and (7) selecting life goals and behavior compatible with these goals.

The physical education program for students at the 7-8 level emphasizes exposure to a wide variety of activities. By the end of grade eight, students should be able to:

Fitness Activities - Explain the principles of exercise and diet that contribute to the development of the totally fit individual. They should know the fitness value of a variety of activities and be able to design a personal fitness program based on individual needs and interests. Students should seek to attain a minimal level of physical fitness as indicated by the results of a standardized fitness test.

Dance - Perform basic recreational dance (folk and social)

Gymnastics - Perform tumbling and apparatus activities at an inter-mediate level of proficiency.

Team Sports - Perform the skills necessary for participation in a minimum of three team sports (basketball, flag football, team handball, soccer, softball, volleyball, etc.).

Individual/Dual Sports - Perform the skills necessary for participating in a minimum of three individual or dual sports (badminton, bowling, golf, tennis, track and field, wrestling, etc.).

In safety education at grade level 7-8, the emphasis is increasingly on developing in students a higher level of knowledge and behavior concerning safety and risk-taking. Students are encouraged to assume individual responsibility and group leadership. To assist in this, there are written guides on the knowledge, content, and learning objectives for these units.

HEALTHFUL LIVING (9-12)

Course emphases in health should reflect student interests and needs in: (1) learning effective family leadership skills; (2) learning to care for one's own children; (3) understanding the causes and effects of disease and methods of disease prevention and treatment; (4) learning about careers in health fields; (5) developing skills necessary to form healthy relationships; (6) developing the skills necessary for a satisfying and healthy life; and (7) learning first-aid skills.

The following offerings, as courses or units, must be a part of a high school program:

Parenting
Cardio-pulmonary Resuscitation
Drugs, Alcohol, & Tobacco
Family Living
Mental Health
Chronic Disease
Consumer Health
Nutrition

Physical education at the senior high school level should be vigorous and challenging and should reflect individual needs and interests. At this level, physical education should emphasize physical fitness and the acquisition of three (3) lifetime activities. The program must include the following components:

Games and Sports (team and individual)
Gymnastics (tumbling, floor exercises, apparatus)
Recreational Dance
Physical Fitness (weight management, strength, endurance, calisthenics, aerobic exercises)

Safety education in all areas in continued. Teachers are expected to use basic safety procedures in their daily activities. At these grade levels, increasing emphasis is given to traffic safety. It is expected that there will be no change in the funding of driver's training programs.

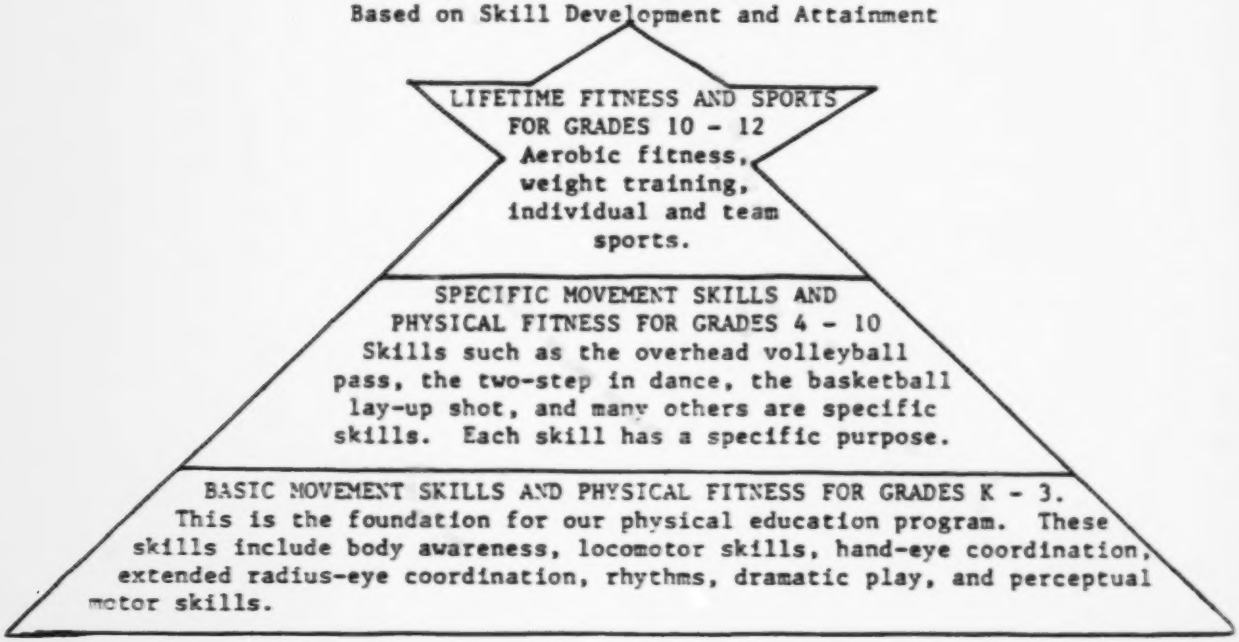
Appendix E

PHILOSOPHY

The elementary school physical education program in the Alamance County Schools is developmental in nature and is designed to provide appropriate movement experiences for all K-5 students. In the primary grades, emphasis is placed on development of basic psychomotor skills which serve as the foundation for more specific skills. These basic skills include body awareness skills, locomotor skills, hand-eye coordination, extended radius-eye coordination, rhythmic skills, and self-control.

Cardiovascular endurance and efficiency are emphasized in physical fitness development with concern also given to the development of arm strength, agility, abdominal strength, and speed.

The role of quality elementary school physical education in the total school program is illustrated in the continuum below:


CONTINUUM OF PROGRAM DEVELOPMENT
Based on Skill Development and Attainment
LIFETIME FITNESS AND SPORTS FOR GRADES 10 - 12
Aerobic fitness, weight training, individual and team sports.
SPECIFIC MOVEMENT SKILLS AND PHYSICAL FITNESS FOR GRADES 4 - 10
Skills such as the overhead volleyball pass, the two-step in dance, the basketball lay-up shot, and many others are specific skills. Each skill has a specific purpose.
BASIC MOVEMENT SKILLS AND PHYSICAL FITNESS FOR GRADES K - 3.
This is the foundation for our physical education program. These skills include body awareness, locomotor skills, hand-eye coordination, extended radius-eye coordination, rhythms, dramatic play, and perceptual motor skills.

Concern is given in the elementary program for the development of all children regardless of their abilities or previous movement experiences. As a result of the development of all children, it is believed the life-time sports and fitness will be appreciated by more citizens in the future.

YOUTH PHYSICAL ACTIVITY AND FITNESS AND THE IMPACT ON NORTH CAROLINA INDUSTRY

A Summary to the Youth Fitness Committee of the Legislative Research Commission

Presented by:

Barbara Pairitz
Supervisor, Benefits & Health Promotion
Square D Company

March 9, 1992

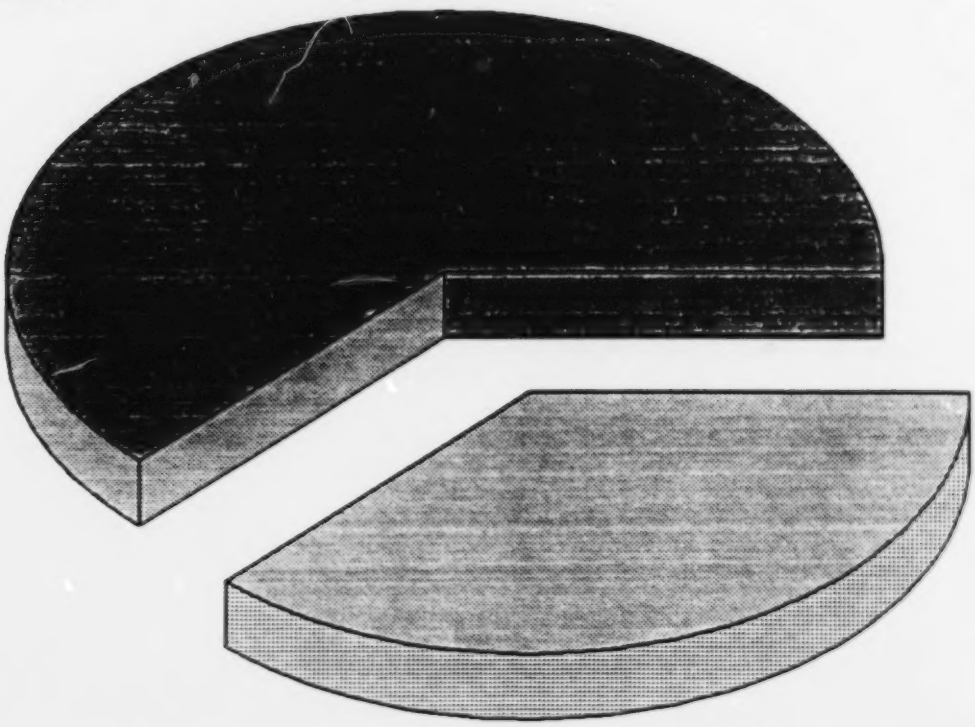
Key Benefits to Industry from Youth Physical Activity

- Reduced health care costs
- Increased productivity

Health benefit cost

as a percentage of net company profits

Net company profits
63%

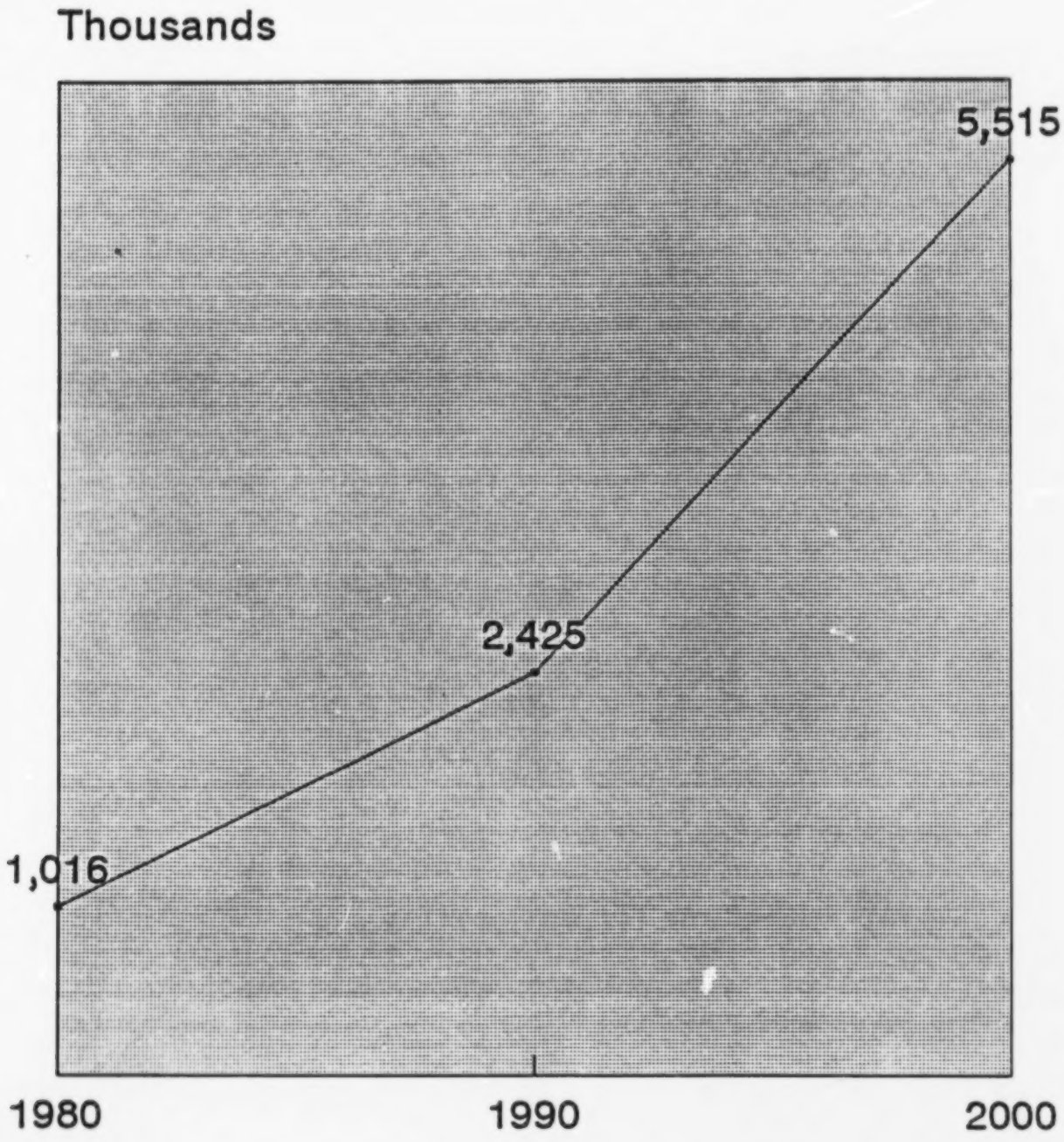


Health benefit cost
37%

Source: National Association of Manufacturers, 1989

U.S. per capita health spending

(in thousands of dollars)



Source: Families USA, Washington. Survey of state health expenditures, 1990

Reduced Health Care Costs

Youth Physical Activity

- Counteracts major risk factors of heart disease
- Promotes a positive, lifelong attitude towards physical activity
- Helps students make appropriate decisions about their behavior and fitness

Costs of Poor Health

Condition	Cost per employee
Heart Disease	$ 30,000
Lung Cancer	$ 29,000
Alcoholism	$250,000
Drug abuse	$ 63,000 (5 years)

Source: Data compiled from various sources by the Office of Disease Prevention and Health Promotion

Increased Productivity

Youth Physical Activity	Benefits to Business
• Improves muscular strength, flexibility, endurance	• Able to sustain work effort through the day
• Improves self-confidence, self-esteem, self-control	• Risk-taker
• Teaches children to follow rules and procedures	• Problem-solving skills
• Develops movement skills	• Efficient handling of materials
• Strengthens peer relationships	• Team player

Who is responsible for tomorrow's workforce?

- Youth
- Family
- Community
- Schools
- Government
- Industry

Appendix G

NORTH CAROLINA CHILDREN AND YOUTH FITNESS STUDY

EXECUTIVE SUMMARY

PURPOSE

The North Carolina Children and Youth Fitness Study (NCCYFS) was designed to provide physical educators school administrators, public officials and legislators with "hard facts" needed to improve the quality and quantity of physical education training received by our children. This study has produced baseline data that will assist in developing curricula in schools as well as community interventions aimed at improving the physical fitness levels of North Carolina youth.

OBJECTIVE

The study was designed to (1) assess the fitness levels of youth in grades 1,3,6, and 9; (2) describe their patterns of participation in physical activity; and (3) determine the factors affecting their fitness.

FITNESS TEST ITEMS

This study replicated the 1987 National Children and Youth Study II. This study, as well as the NCCYFS, measured the following fitness components:

1. Body Composition - Measured by sum of tricep and subscapular skinfolds
2. Flexibility - Measured by sit and reach test
3. Abdominal Strength/Endurance - Number of bent-knee sit-ups that youth can perform in one minute
4. Upper Body Strength/Endurance - Number of modified pull-ups youth can perform
5. Cardiorespiratory Endurance - Time youth can walk/run 1/2 mile (6-7 year olds) or 1 mile (8-16 year olds).

The NCCYFS modified two survey instruments used in the national study. They are:

1. Parents' Survey - indicates fitness activity of children outside of school; parental fitness habits; television viewing habits of children; etc.
2. Teachers' Survey-indicates information on physical education classes; fitness testing; feedback to parents; etc.

TEST ADMINISTRATORS

Physical Education faculty from North Carolina State University conducted the fitness testing on Fridays throughout the school year.

SAMPLE

Youth (n=2108) from 38 schools participated in the study. The schools were randomly selected using State Department of Public Instruction data tapes. Schools were selected based upon region (west, piedmont, and east) and size of the school. First grade (n=10), third grade (n=9), sixth grade (n=10), and ninth grade (n=9) classes were chosen. Due to financial and time constraints, not every grade level was tested.

The four grades selected were believed to accurately demonstrate the differing opportunities for physical education instruction in North Carolina schools. In addition to the testing, the students' parents were asked to complete a survey which asked about the child's television viewing habits and the parents' fitness habits. The persons responsible for physical education at each school completed a questionnaire which asked about the amount and quality of physical education that children were offered at their school.

Although the study includes students of all ages, the North Carolina sample represents primarily four age groups as highlighted below.

GRADE	AGE
1	6,7
3	8,9,10
6	11,12,13
9	14,15,16

RESULTS

Results of this study were compared with the National Children and Youth Fitness Study I (ages 10-16) and the National Children and Youth Fitness Study II (ages 6-9).

Fitness Measures

Body Composition

Males - 7 out of 11 ages have a larger sum of skinfolds with the 11 and 12 year old males being significantly higher than the national.
Females - 10 out of 11 ages have a larger sum of skinfolds with the 11 and 12 year old females being significantly higher than the national.

Flexibility

Males - 9 out of 11 ages were less flexible as measured by the sit and reach test with ages 6,7,8,9,10,11, and 12 being significantly lower in flexibility.
Females - All 11 ages were less flexible as measured by the sit and reach with ages 6,7,8,9,10 11, 12, 13, and 15 being significantly lower in flexibility.

Abdominal Strength/Endurance

Males - Very similar to national data with no significant differences.
Females - Very similar to national data with no significant differences.

Upper Body Strength/Endurance

Males - No significant differences for 6-9 year olds; ages 10 and older could not be compared because the national study used traditional pull-ups for these ages.
Females - No significant differences for 6-9 year olds; ages 10 and older could not be compared because the national study used traditional pull-ups for these ages.

Cardiorespiratory Endurance

Males - 10 out of 11 ages were less aerobically fit with ages 9,11,12, and 13 being significantly less fit.
Females - 10 out of 11 ages were less aerobically fit with ages 8,9,12, and 13 being significantly less fit.

Regional Data

Looking at regional data, we find some differences but none that are significant. Sixth graders in all regions have a higher percent body fat than do third or ninth graders.

PE Specialist/Teacher

For the most part, younger children in North Carolina (first, third and sixth grades) are only getting the benefit of a certified physical education specialist one day per week. Only 29.5% of the ninth grade students have physical education daily. Of course, the younger children are getting even less.

Parent/Child Exercise Habits

Parents seldom exercise with their children. First graders tend to be active with their mothers and fathers an average of 1.24 days and 1.33 days per week, respectively. By ninth grade, their activity drops to .86 and .98, respectively.

Youth Television Viewing Habits

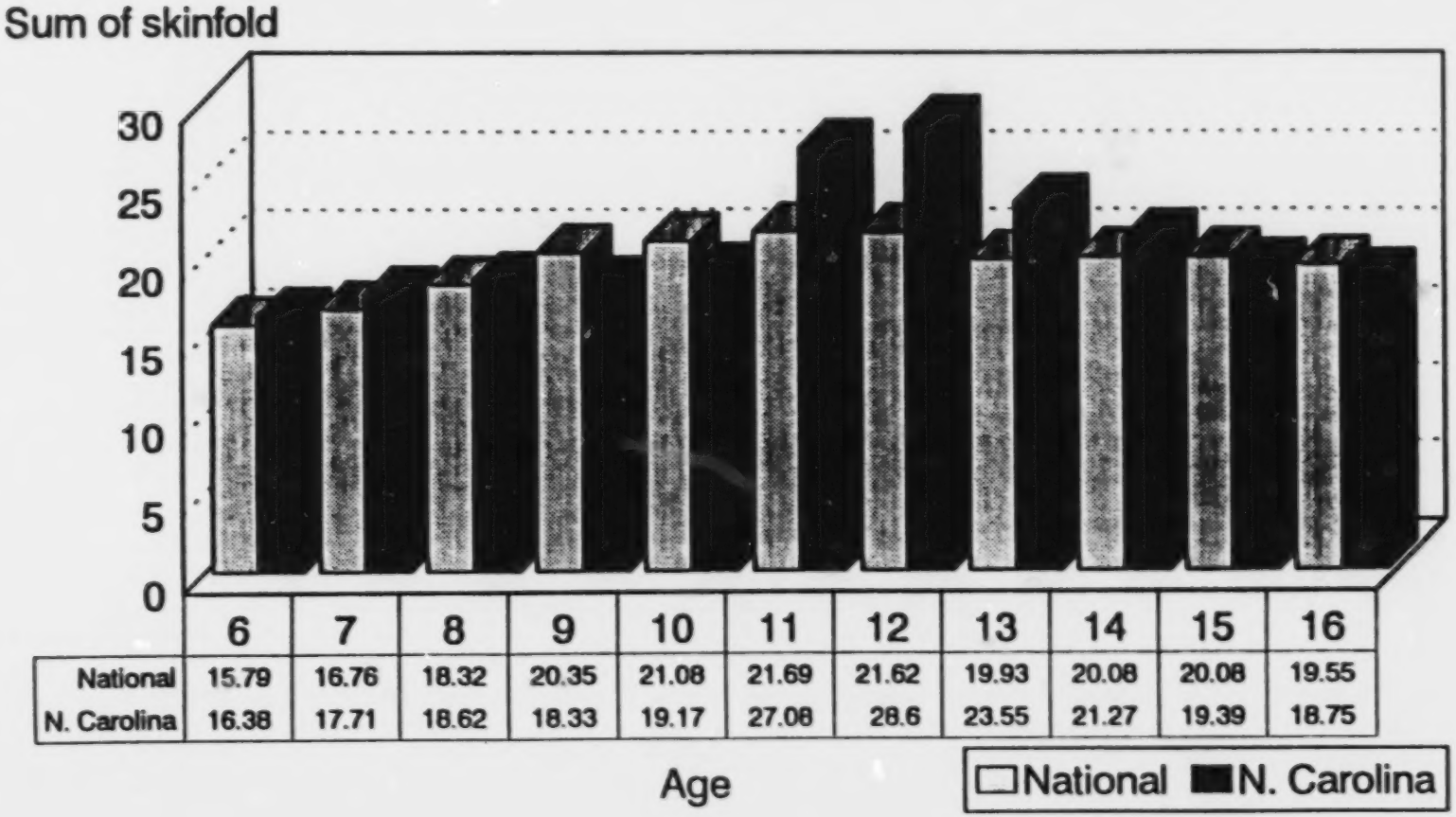
First grade children in North Carolina watch an average of 2.4 hours of television on school days and 3.7 hours on weekends, as reported by their parents. Third graders watch an average of 2.3 and 3.7 hours on schools days and weekends, respectively. Average television viewing for sixth graders was reported at 2.5 and 3.8 hours for school day and weekends viewing. Ninth graders watched an average of 2.5 and 3.5 hours during weekdays and on weekends, respectively. Another report, the National Assessment of Educational Progress (1990), states that 21 percent of North Carolina youth watch six or more hours of television each day. This is the highest percentage in the nation!

CONCLUSIONS

On the national level, there is overwhelming consensus that our youth are in extremely poor physical condition. The results of the North Carolina Children and Youth Fitness Study suggest that our children exhibit equally poor physical fitness levels. In fact, the data show that North Carolina boys and girls in several grades exhibit significantly higher levels of body fat, lower flexibility, and less aerobic conditioning. Overall, our children are not getting the benefit of instruction by a physical education teacher often enough to make a difference in their fitness levels. Since parents seldom exercise with their children, schools must provide quality physical education programs that will improve the physical fitness levels of North Carolina youth.

AVERAGE SUM OF TRICEP AND SUBSCAPULAR SKINFOLD- MALE

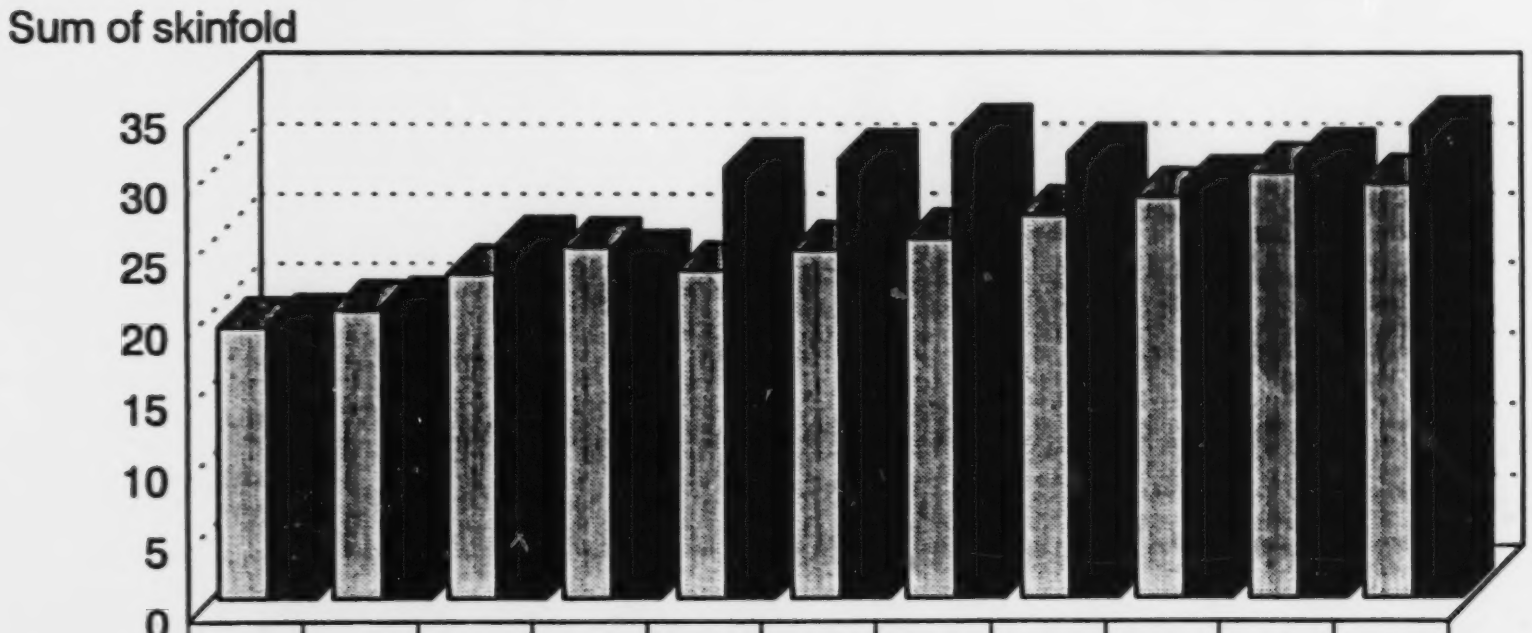
Comparison of North Carolina and National



	6	7	8	9	10	11	12	13	14	15	16
National	15.79	16.76	18.32	20.35	21.08	21.69	21.62	19.93	20.08	20.08	19.55
N. Carolina	16.38	17.71	18.62	18.33	19.17	27.08	28.6	23.55	21.27	19.39	18.75

AVERAGE SUM OF TRICEP AND SUBSCAPULAR SKINFOLD - FEMALE

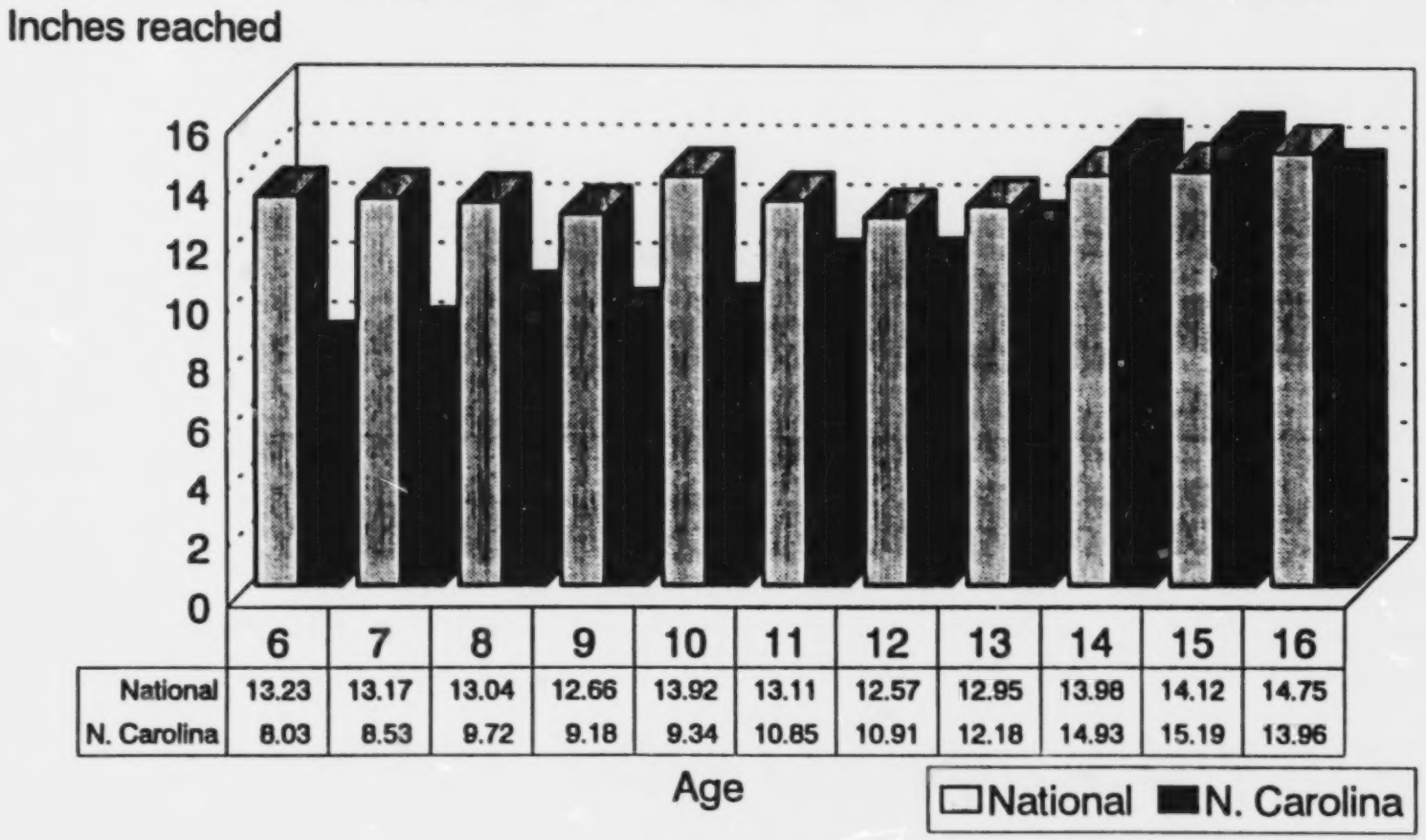
Comparison of North Carolina and National



	6	7	8	9	10	11	12	13	14	15	16
National	19.13	20.32	22.86	24.8	23.1	24.55	25.4	27.07	28.39	30.17	29.34
N. Carolina	19.39	20.59	24.95	23.93	30.52	31.13	32.9	31.55	29.26	31.19	33.46

SIT AND REACH BY AGE - MALE

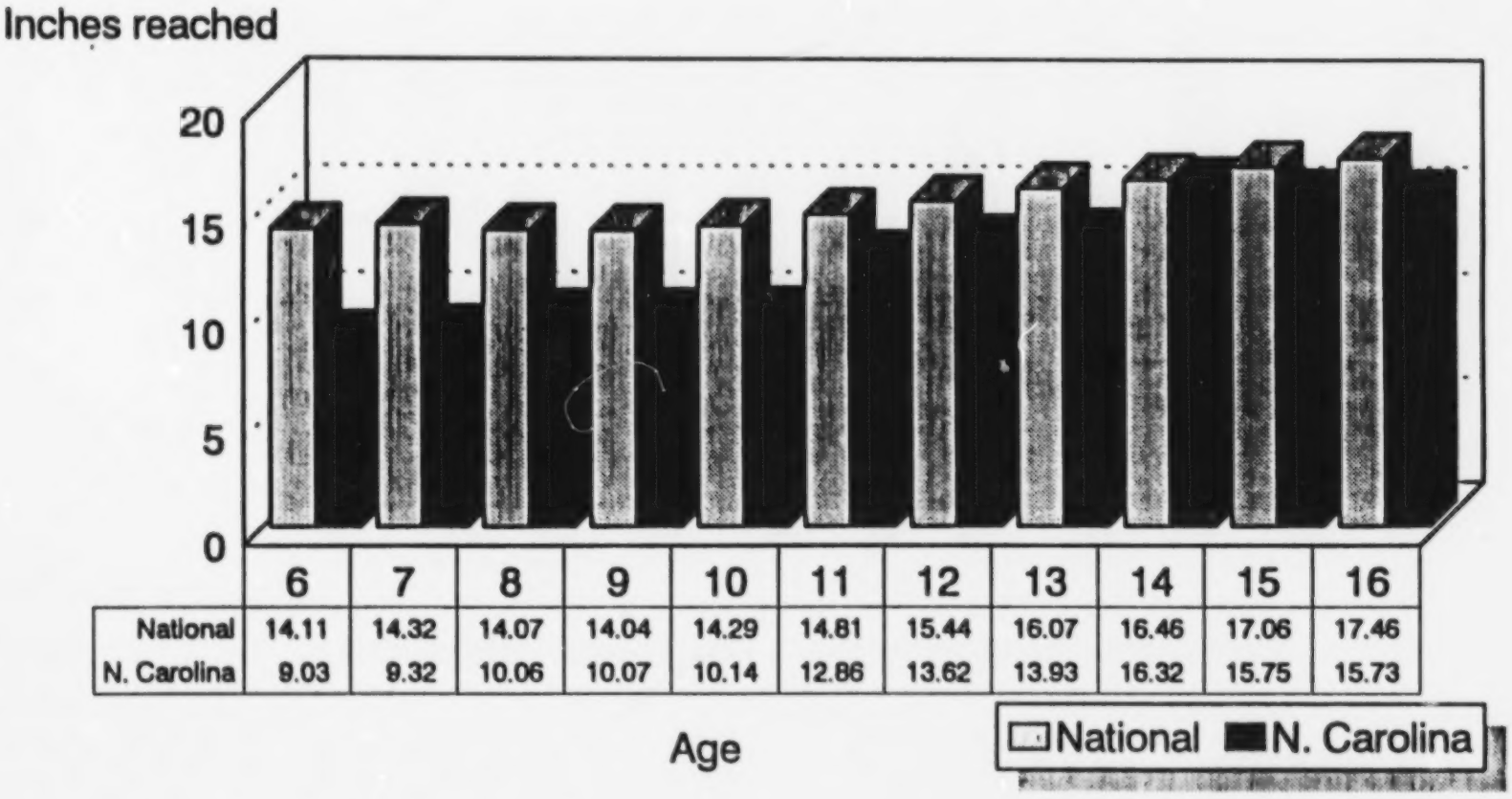
Comparison of North Carolina and National



	6	7	8	9	10	11	12	13	14	15	16
National	13.23	13.17	13.04	12.66	13.92	13.11	12.57	12.95	13.98	14.12	14.75
N. Carolina	8.03	8.53	9.72	9.18	9.34	10.85	10.91	12.18	14.93	15.19	13.96

SIT AND REACH BY AGE - FEMALES

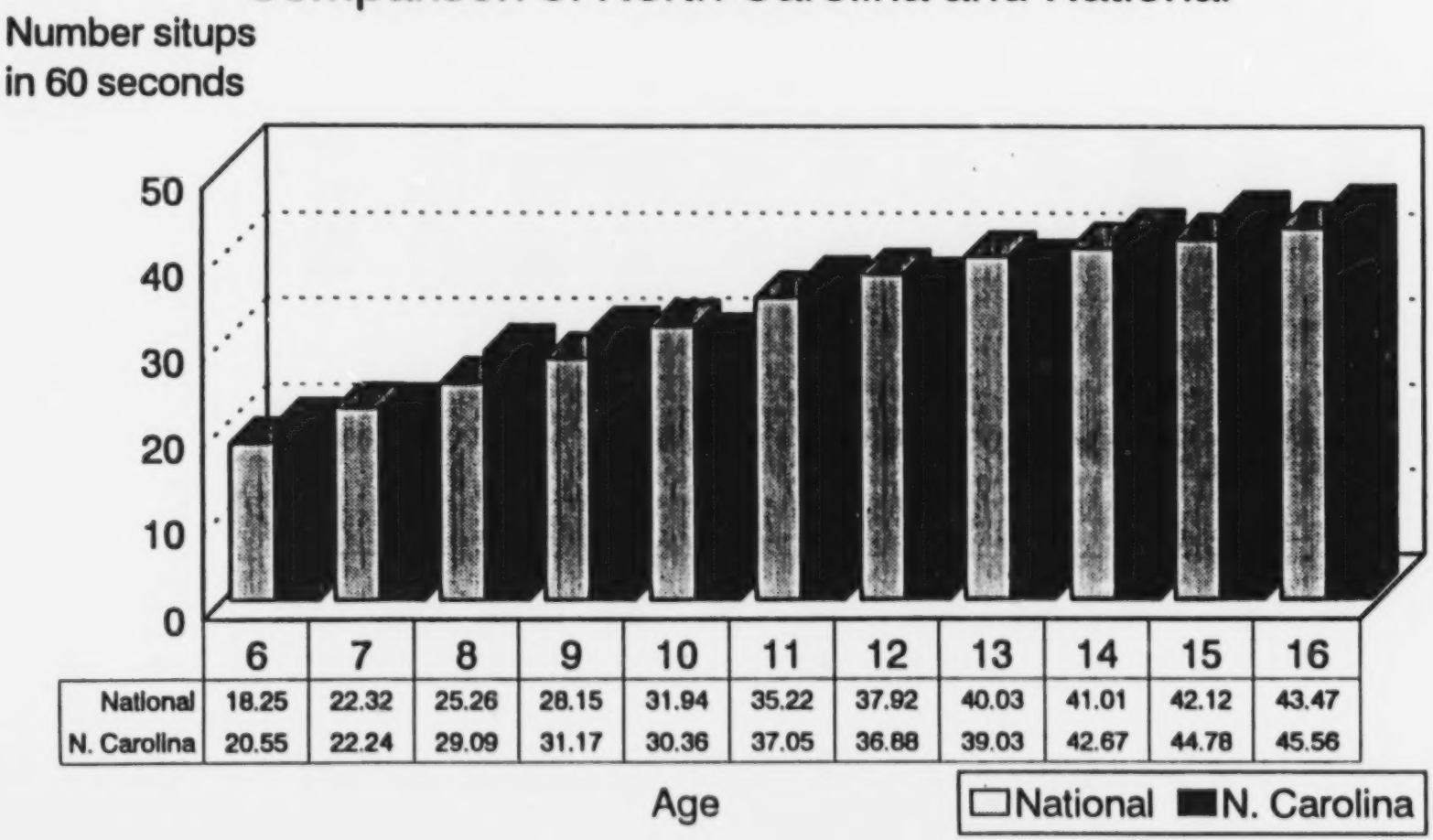
Comparison of North Carolina and National



	6	7	8	9	10	11	12	13	14	15	16
National	14.11	14.32	14.07	14.04	14.29	14.81	15.44	16.07	16.46	17.06	17.46
N. Carolina	9.03	9.32	10.06	10.07	10.14	12.86	13.62	13.93	16.32	15.75	15.73

AVERAGE SITUPS BY AGE - MALE

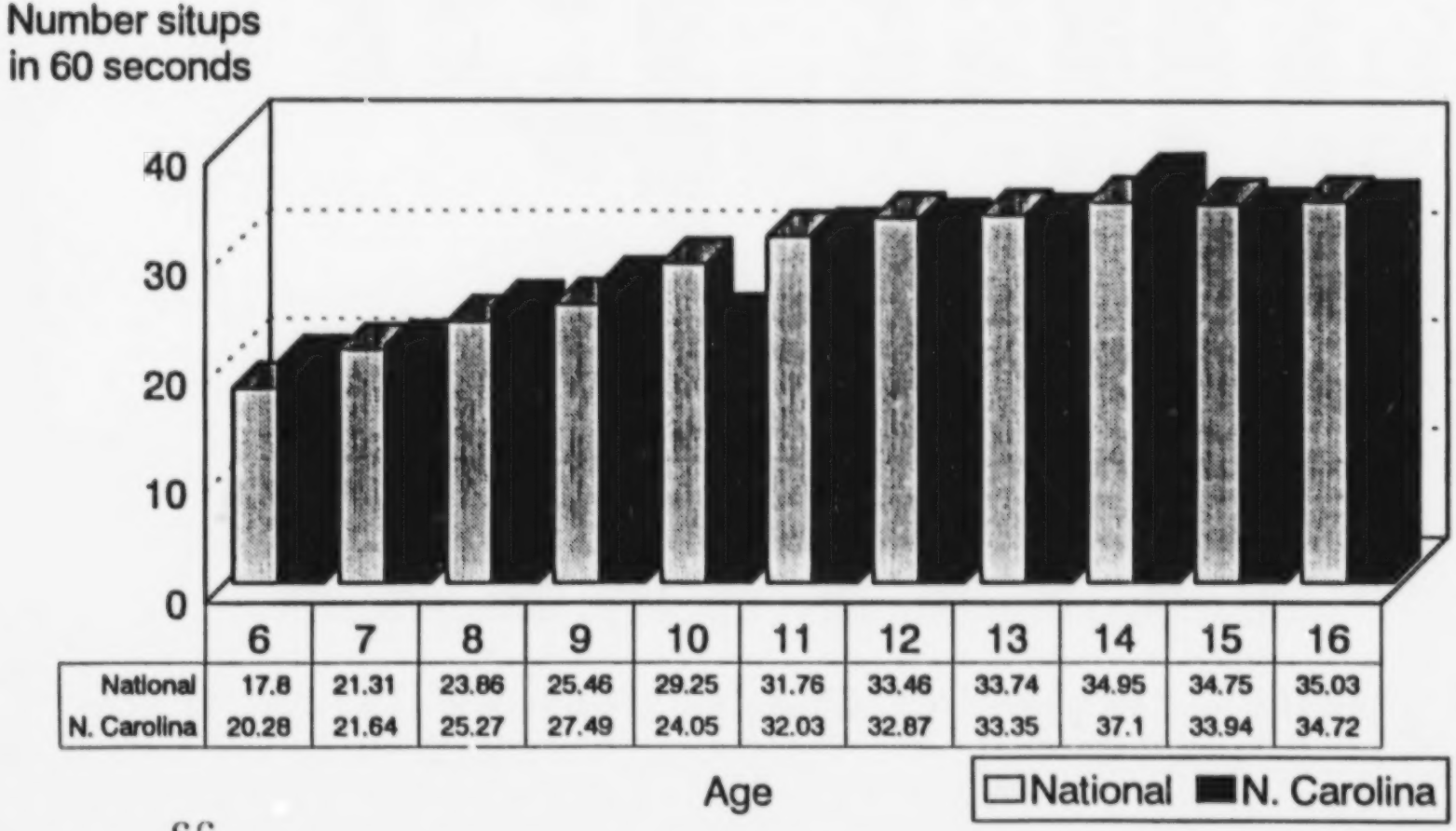
Comparison of North Carolina and National



	6	7	8	9	10	11	12	13	14	15	16
National	18.25	22.32	25.26	28.15	31.94	35.22	37.92	40.03	41.01	42.12	43.47
N. Carolina	20.55	22.24	29.09	31.17	30.36	37.05	36.88	39.03	42.67	44.78	45.56

AVERAGE SITUPS BY AGE - FEMALE

Comparison of North Carolina and National

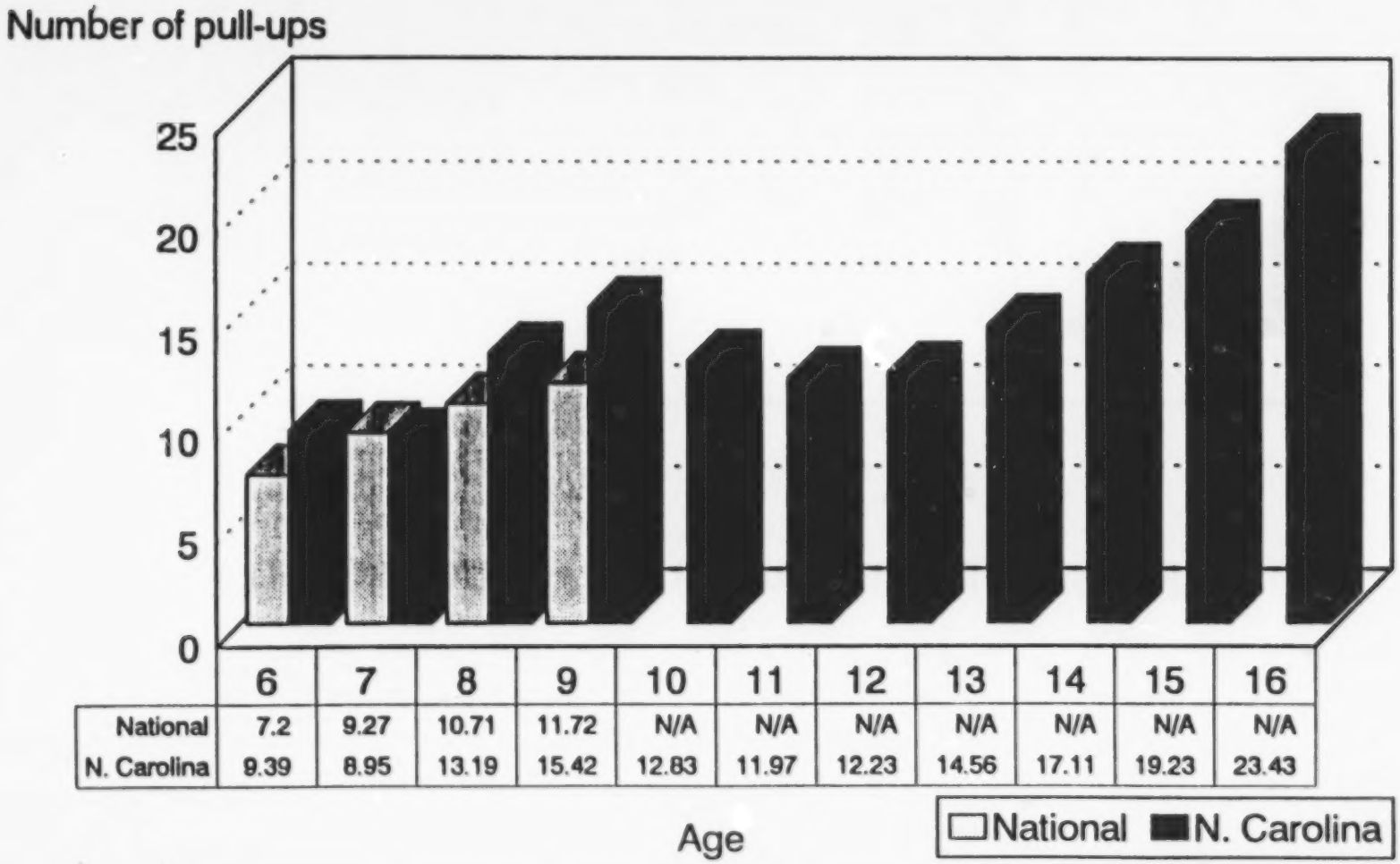


	6	7	8	9	10	11	12	13	14	15	16
National	17.8	21.31	23.86	25.46	29.25	31.76	33.46	33.74	34.95	34.75	35.03
N. Carolina	20.28	21.64	25.27	27.49	24.05	32.03	32.87	33.35	37.1	33.94	34.72

C-9

MODIFIED PULL-UPS BY AGE - MALE

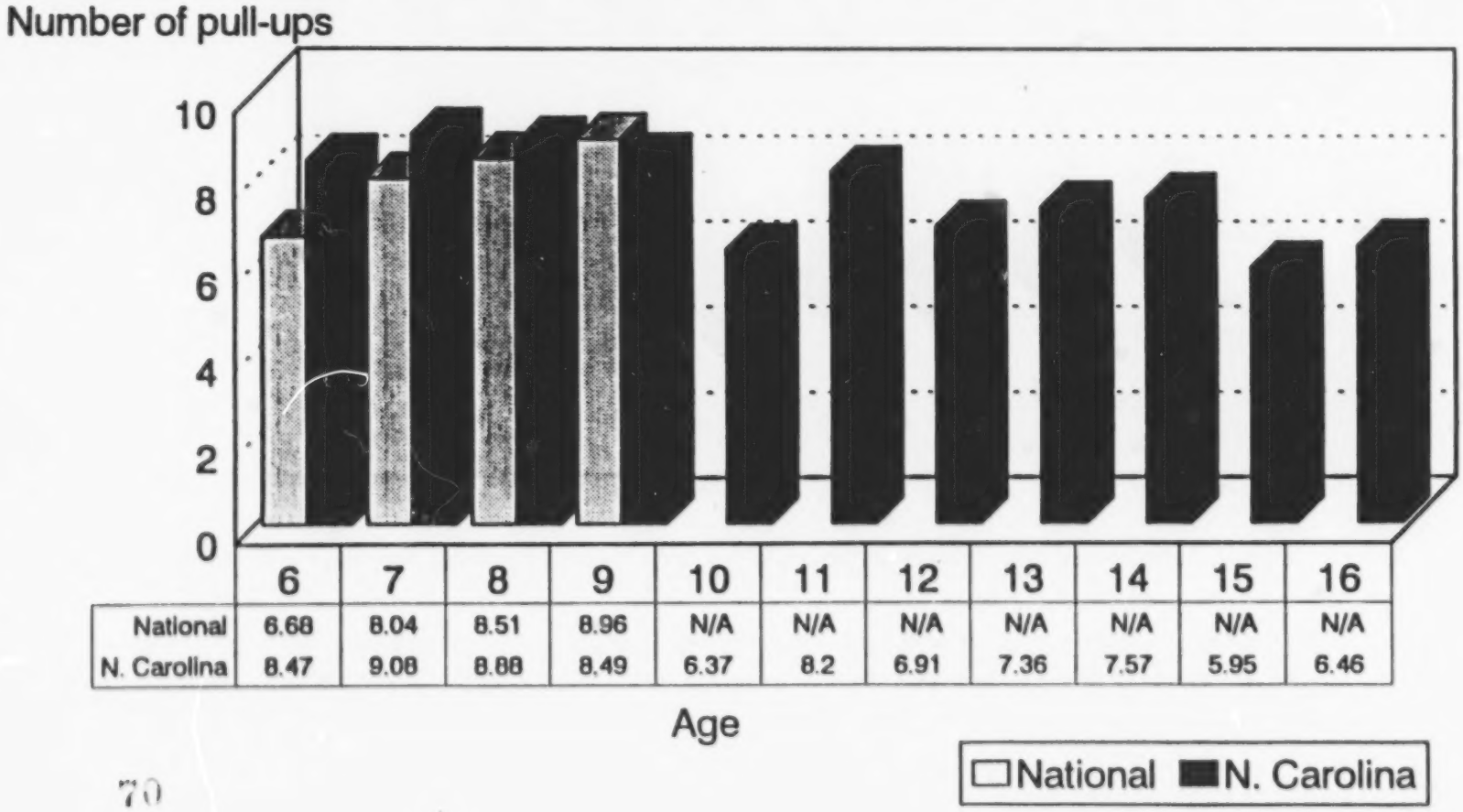
Comparison of North Carolina and National



	6	7	8	9	10	11	12	13	14	15	16
National	7.2	9.27	10.71	11.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N. Carolina	9.39	8.95	13.19	15.42	12.83	11.97	12.23	14.56	17.11	19.23	23.43

MODIFIED PULL-UPS BY AGE - FEMALE

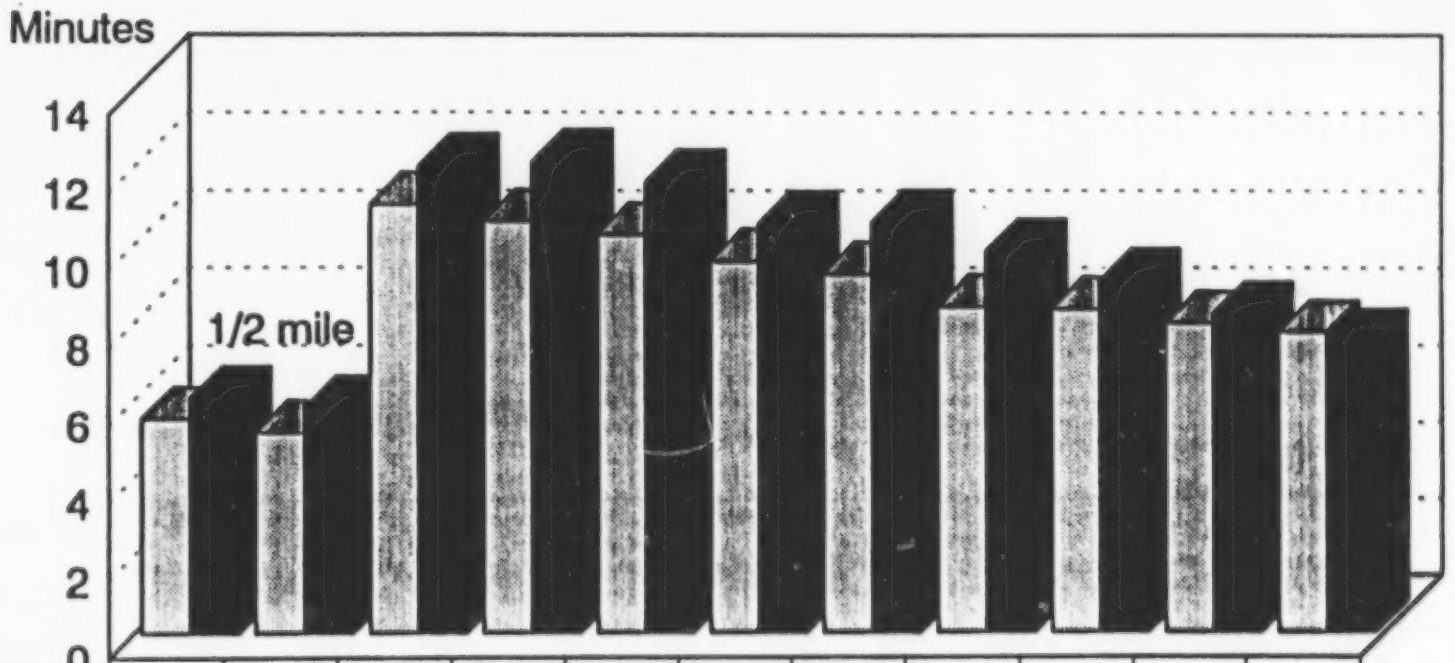
Comparison of North Carolina and National



	6	7	8	9	10	11	12	13	14	15	16
National	6.68	8.04	8.51	8.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N. Carolina	8.47	9.08	8.88	8.49	6.37	8.2	6.91	7.36	7.57	5.95	6.46

WALK/RUN BY AGE - MALE

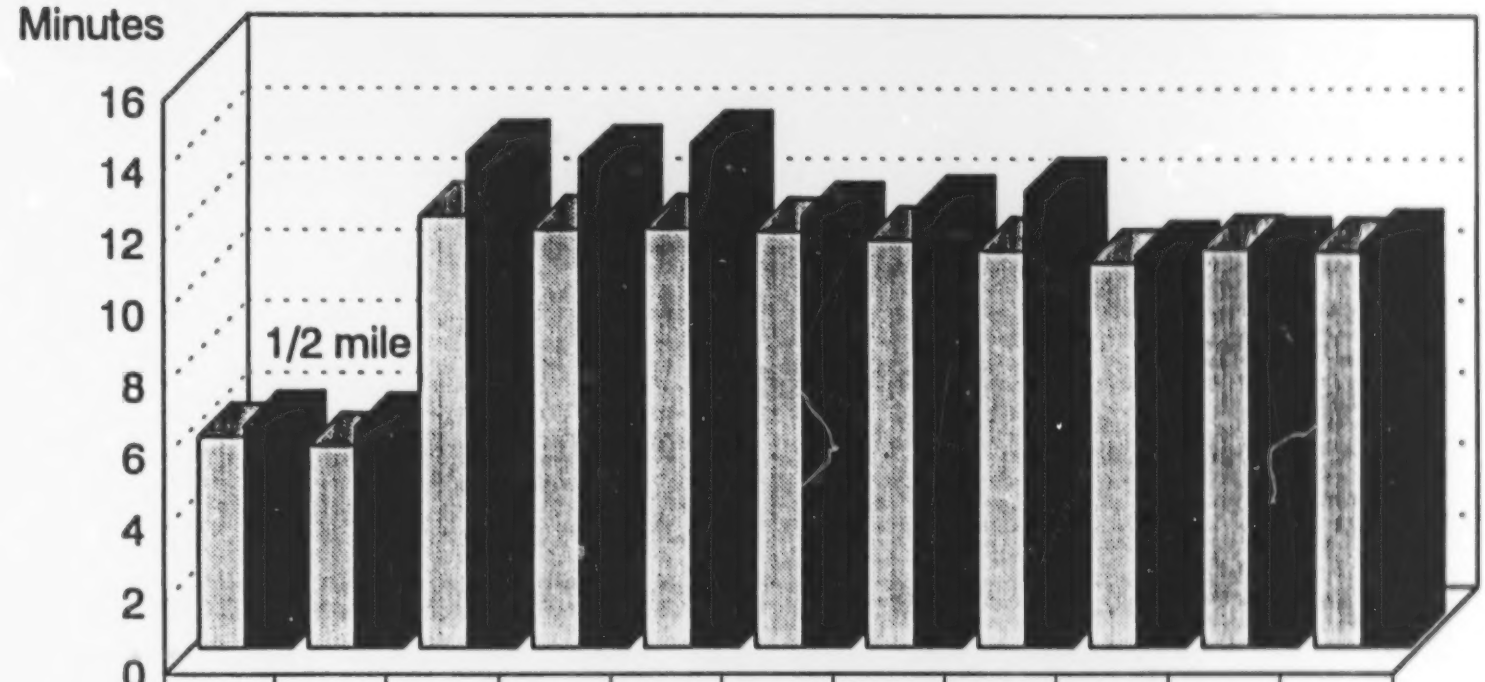
Comparison of North Carolina and National



	6	7	8	9	10	11	12	13	14	15	16
National	5.54	5.19	11.08	10.64	10.29	9.61	9.28	8.45	8.39	8.02	7.79
N. Carolina	6.08	5.83	12.06	12.17	11.65	10.59	10.62	9.88	9.12	8.27	7.57

WALK/RUN BY AGE - FEMALE

Comparison of North Carolina and National

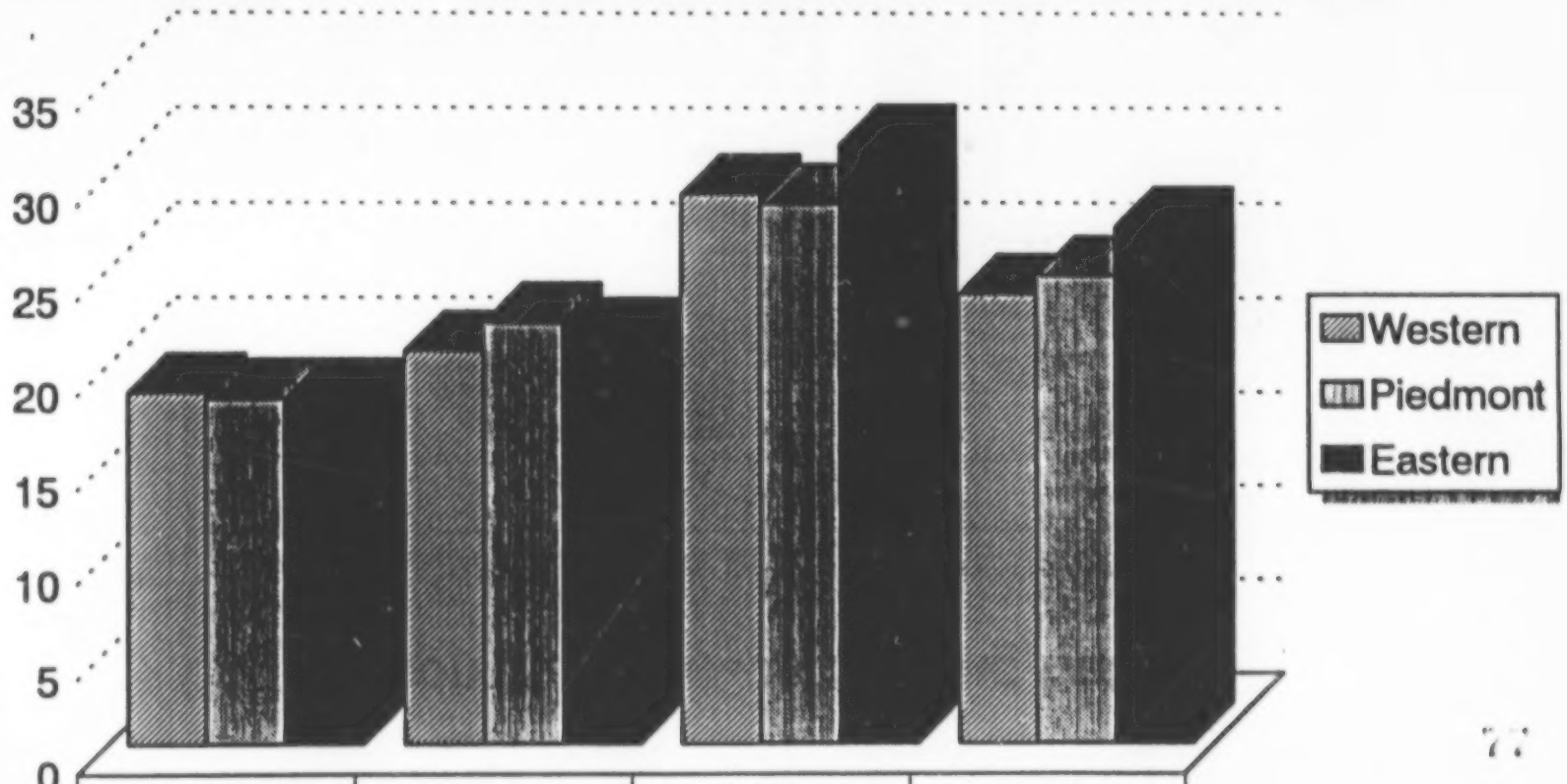


	6	7	8	9	10	11	12	13	14	15	16
National	5.85	5.59	12.04	11.67	11.7	11.6	11.37	11.07	10.72	11.13	11.05
N. Carolina	6.2	6.14	13.82	13.68	14.09	12.04	12.24	12.74	10.95	11.07	11.29

G-13

Physical Fitness Measures by Region of the State

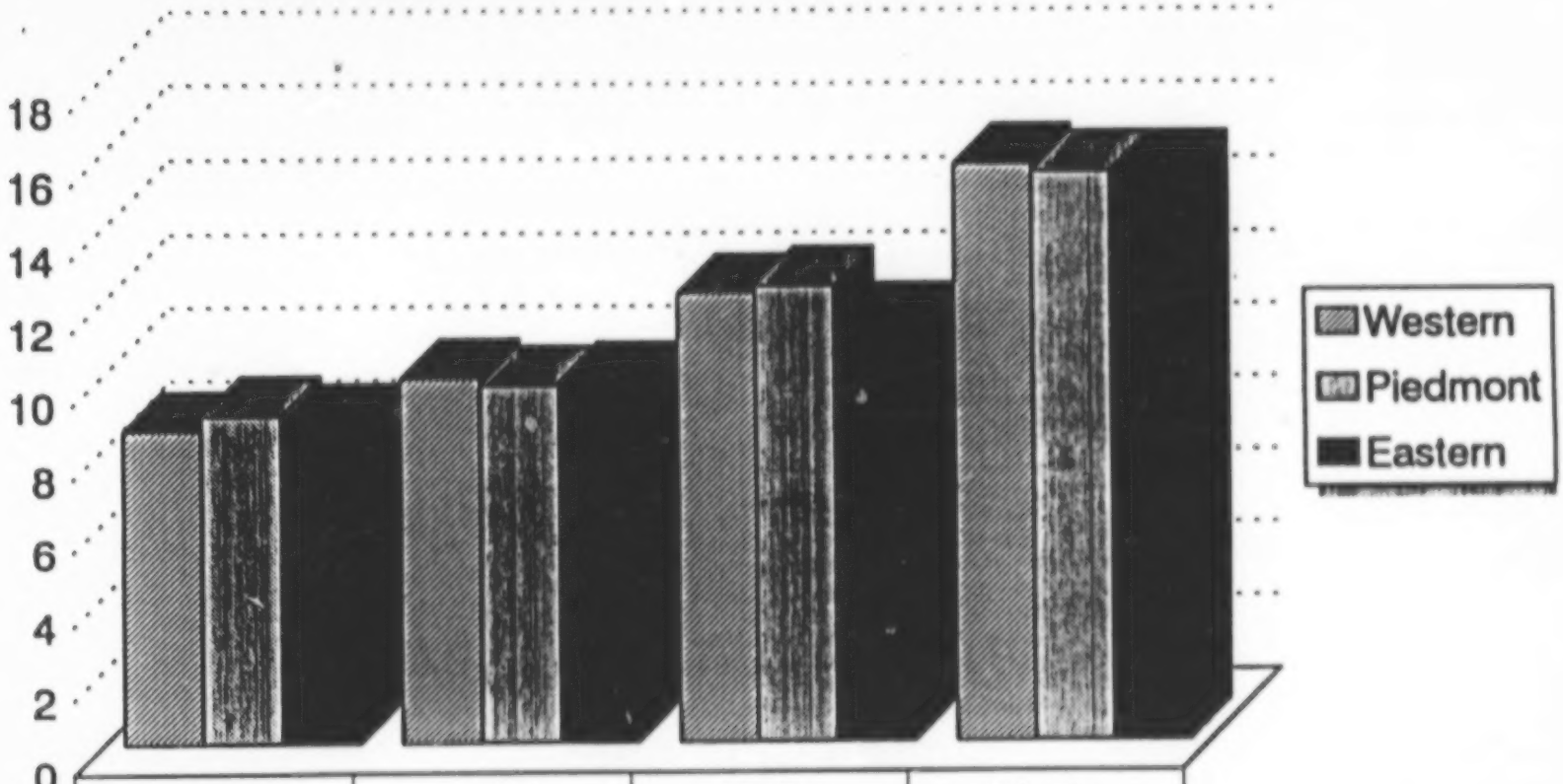
Average Sum of Subscapular and Triceps By Grade



	First	Third	Sixth	Ninth
Western	18.6	20.8	29.1	23.8
Piedmont	18.3	22.3	28.6	24.8
Eastern	18.3	21.5	31.7	27.4

Physical Fitness Measures by Region of the State

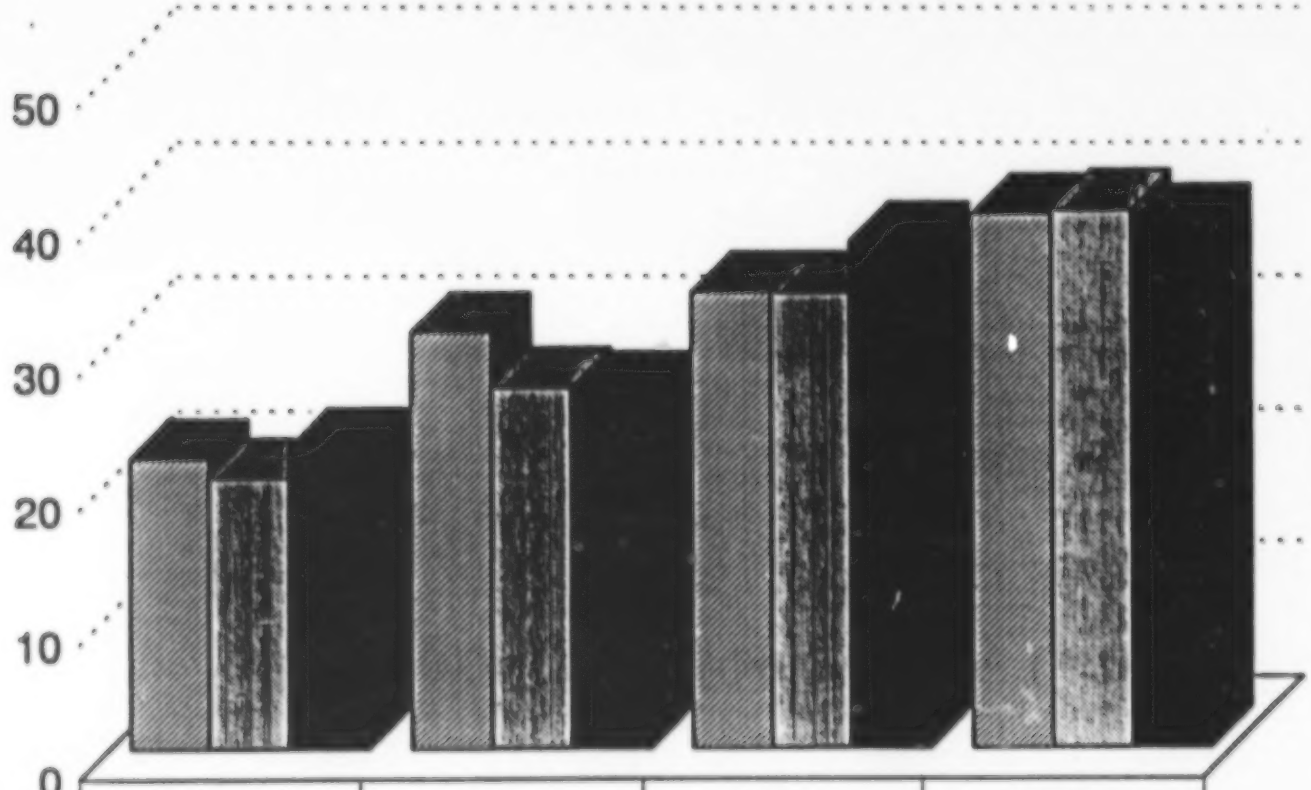
Average Sit and Reach By Grade



	First	Third	Sixth	Ninth
Western	8.5	9.9	12.2	15.7
Piedmont	8.9	9.7	12.4	15.5
Eastern	8.7	9.8	11.4	15.5

Physical Fitness Measures by Region of the State

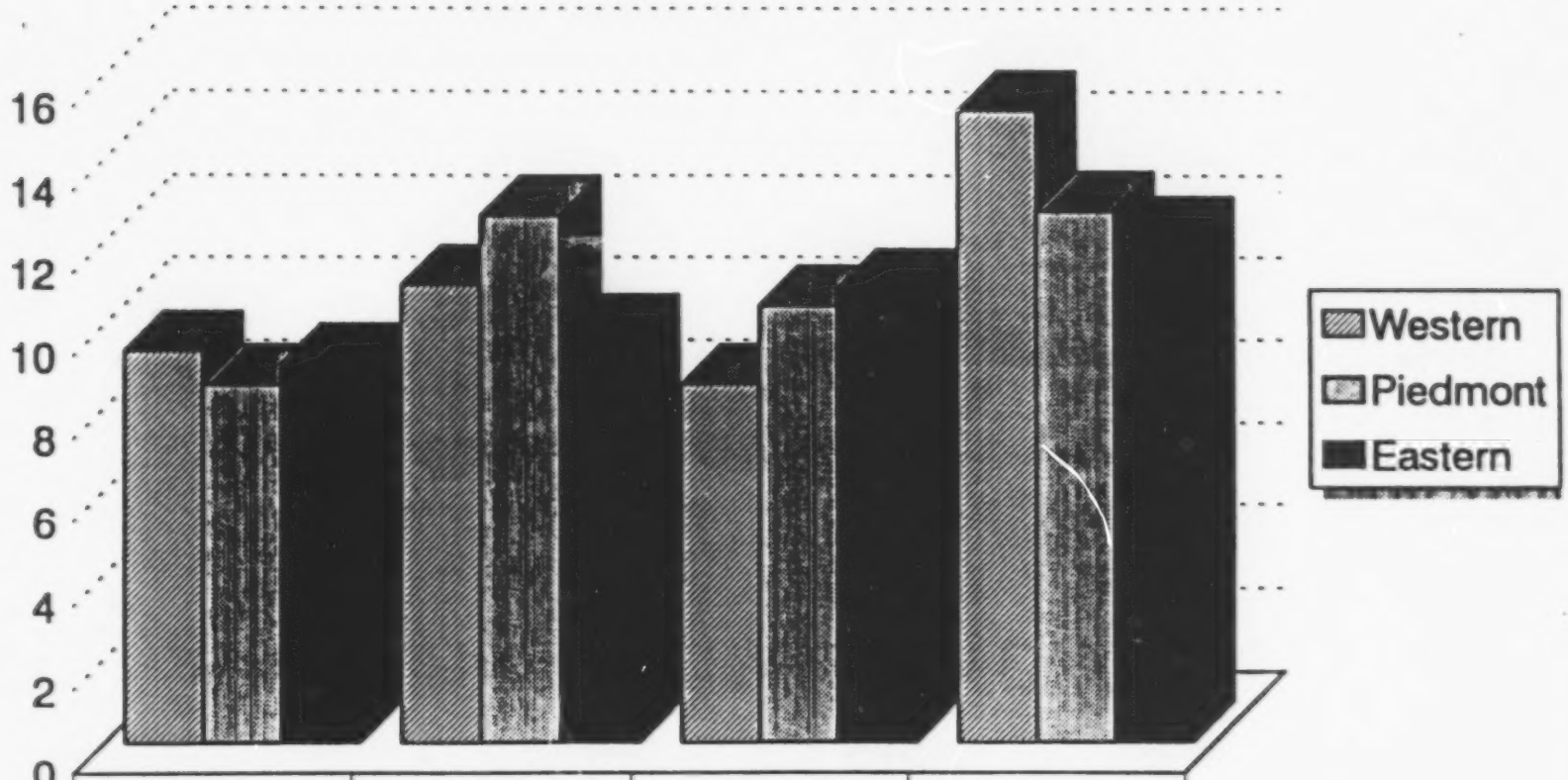
Average Situps By Grade



	First	Third	Sixth	Ninth
Western	21.6	31	34	39.9
Piedmont	20.2	26.9	34	40.2
Eastern	22.4	26.6	37.8	39.1

Physical Fitness Measures by Region of the State

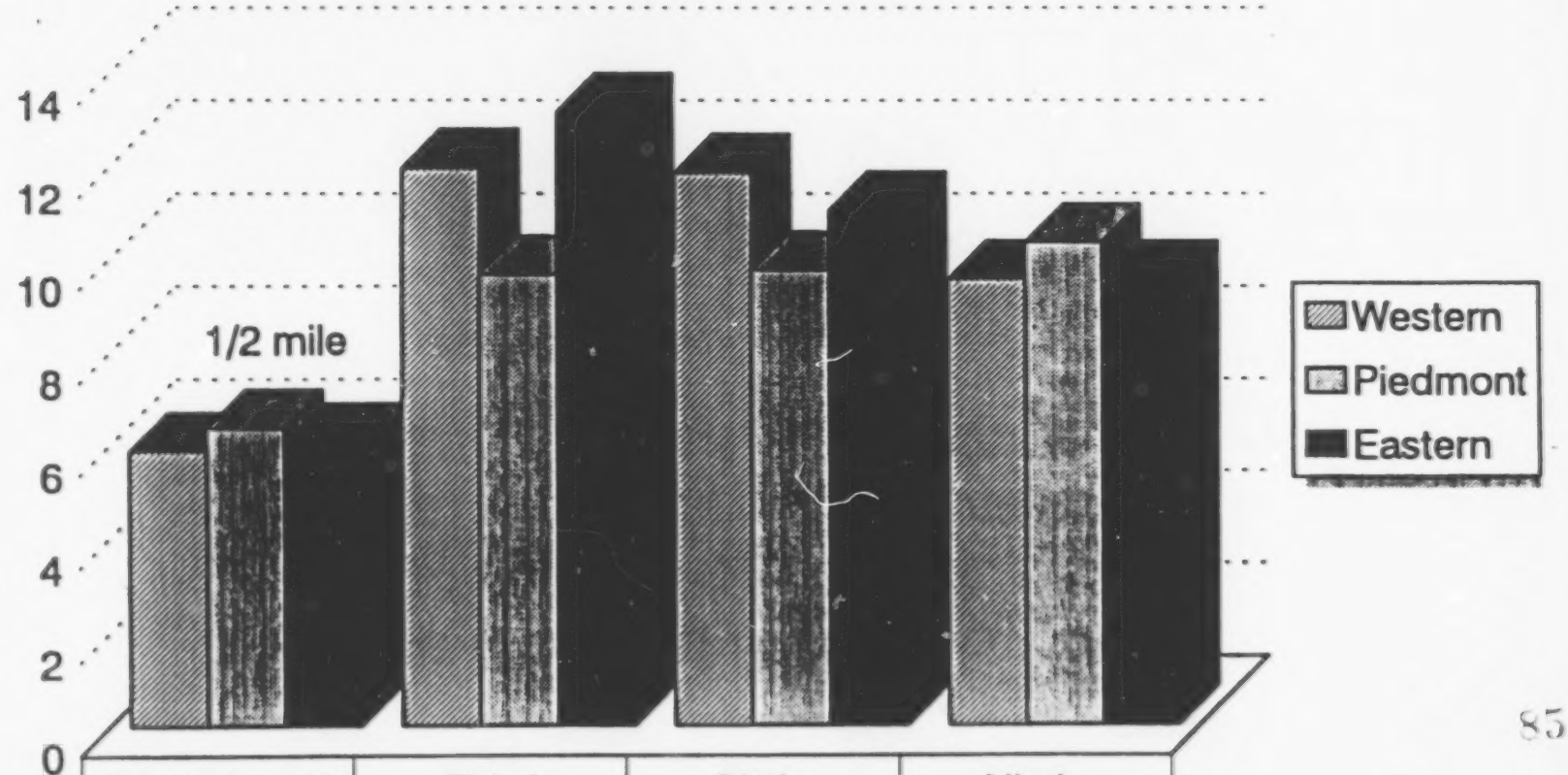
Average Modified Pullups By Grade



	First	Third	Sixth	Ninth
Western	9.4	11	8.6	15.2
Piedmont	8.6	12.7	10.5	12.8
Eastern	9.1	9.8	10.9	12.2

Physical Fitness Measures by Region of the State

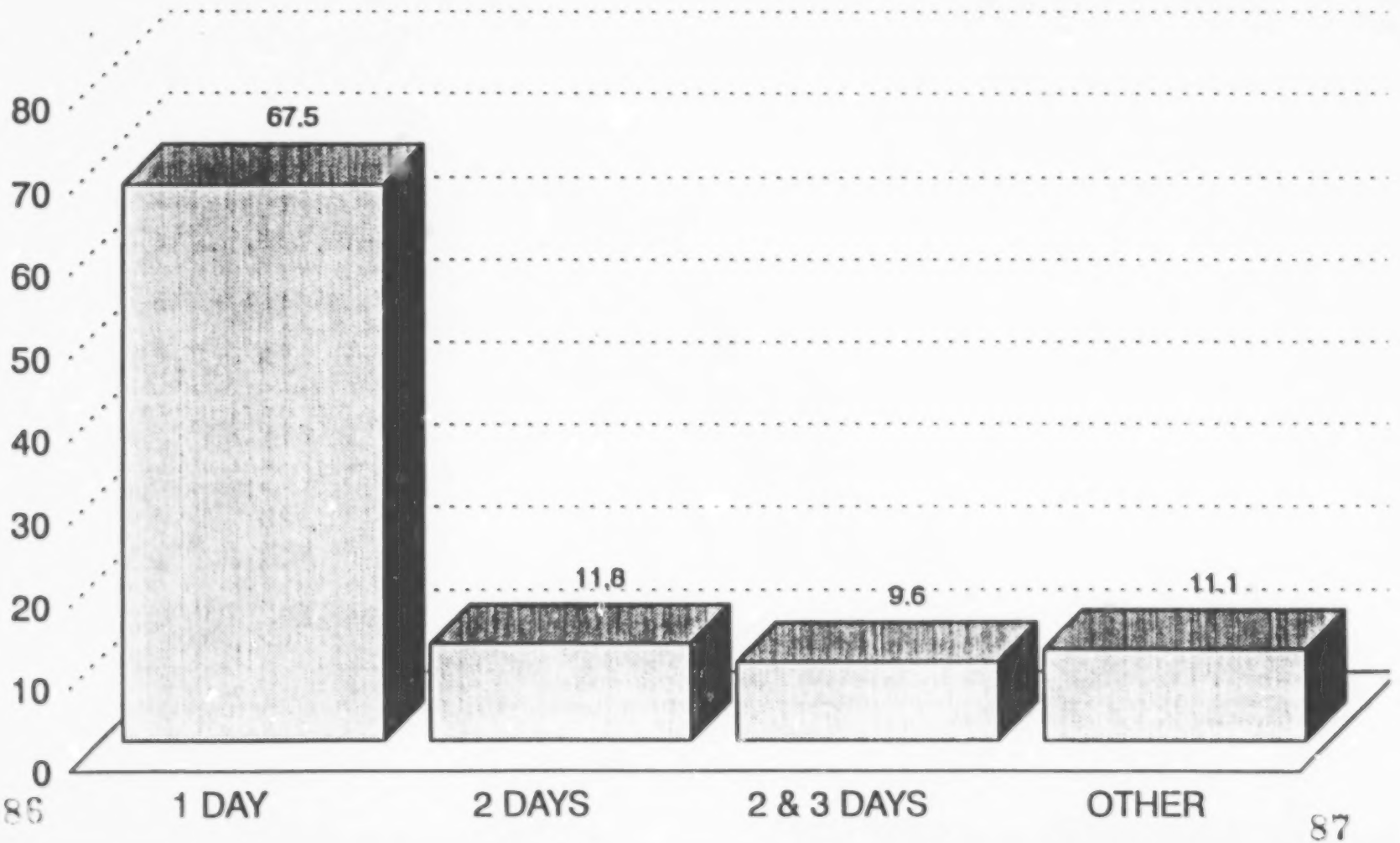
Average Half Mile/1 Mile Run By Grade



	First (1/2 mi.)	Third	Sixth	Ninth
Western	5.9	12	11.9	9.6
Piedmont	6.4	9.7	9.8	10.4
Eastern	6.1	13.2	11.1	9.6

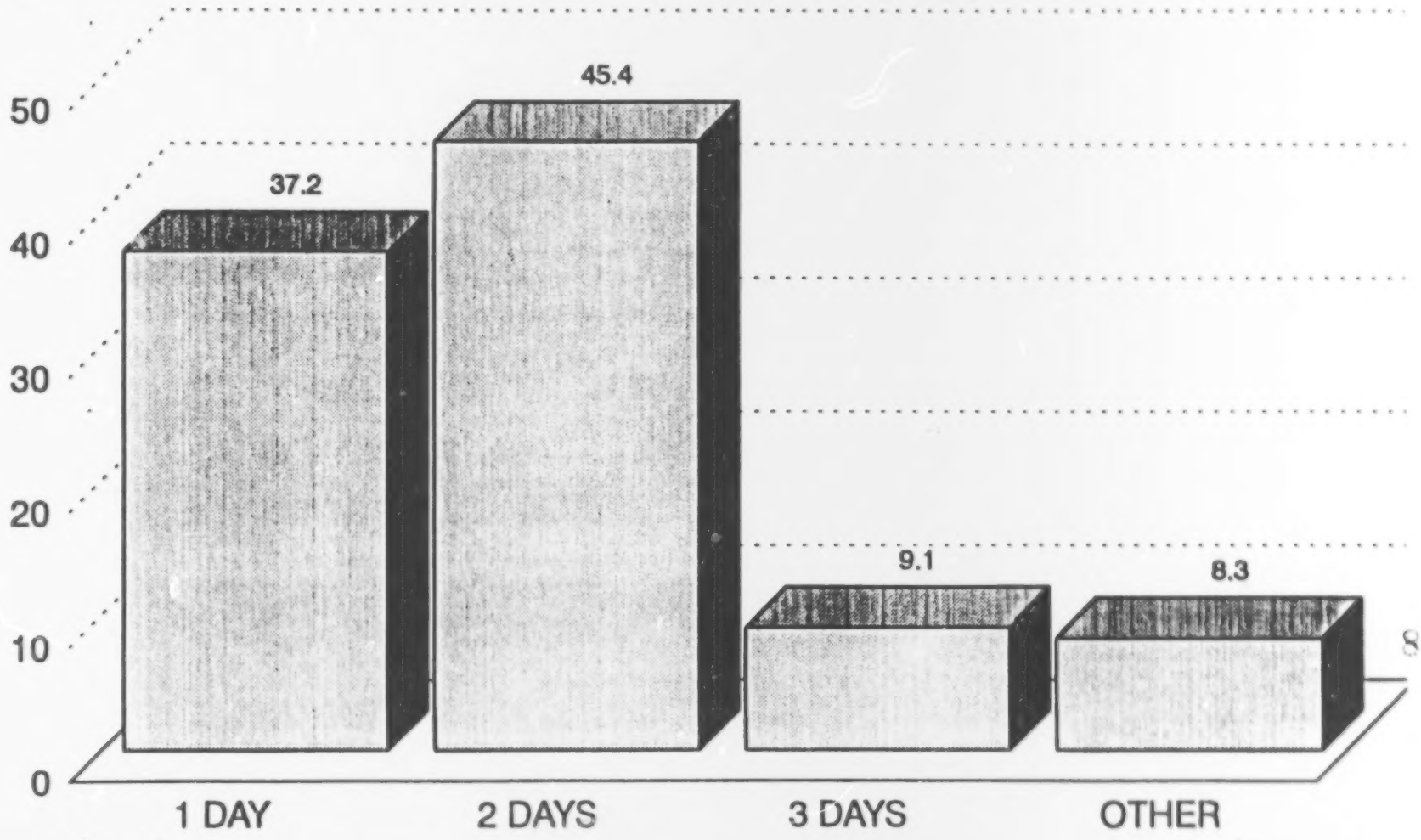
Days with PE Specialist

Percent of **First Grade** Students by Days per Week



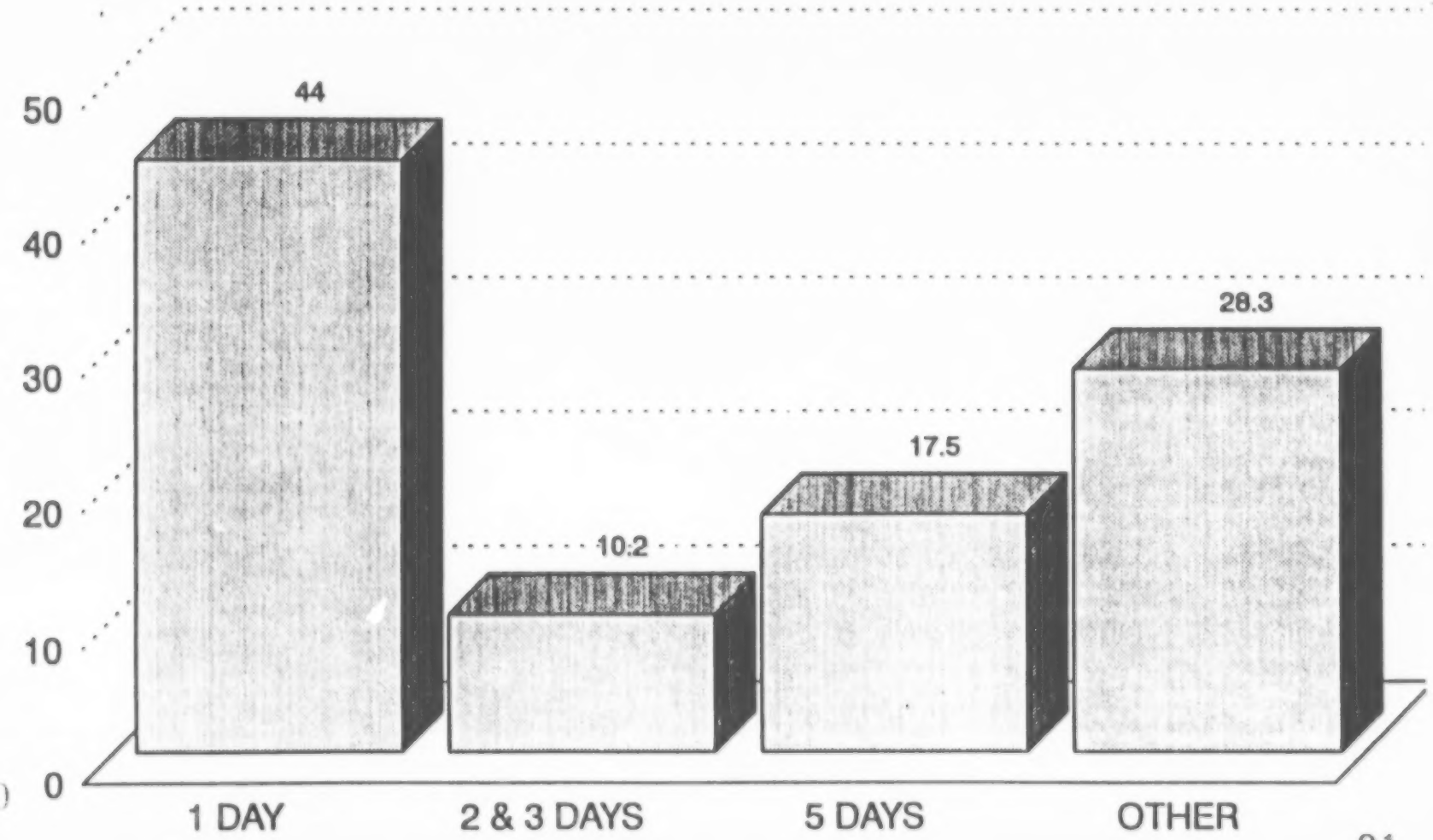
Days with PE Specialist

Percent of **Third Grade** Students by Days per Week



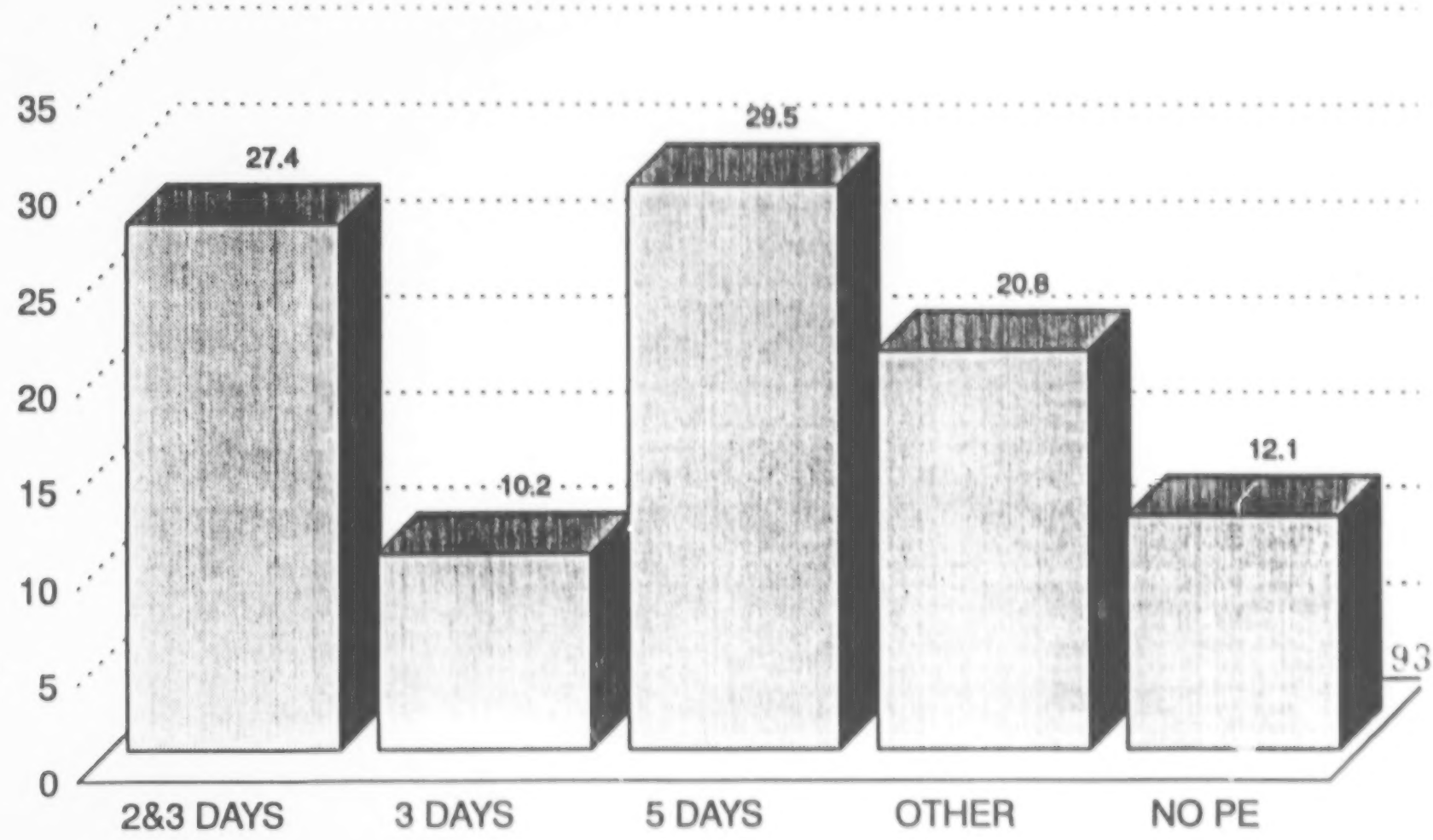
Days with PE Specialist

Percent of **Sixth Grade** Students by Days per Week

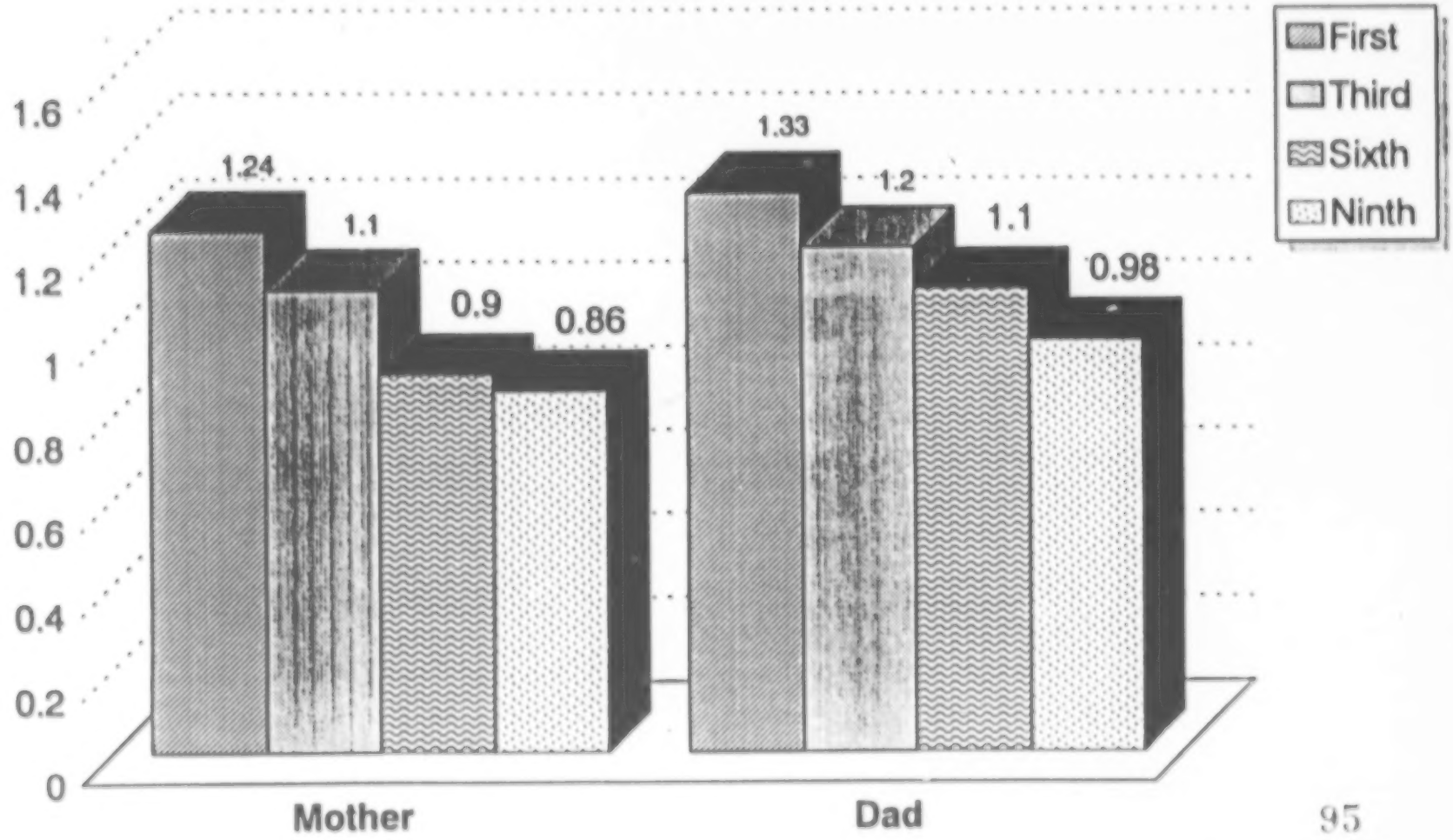


Days with Certified PE Teacher

Percent of **Ninth Grade** Students by Days per Week

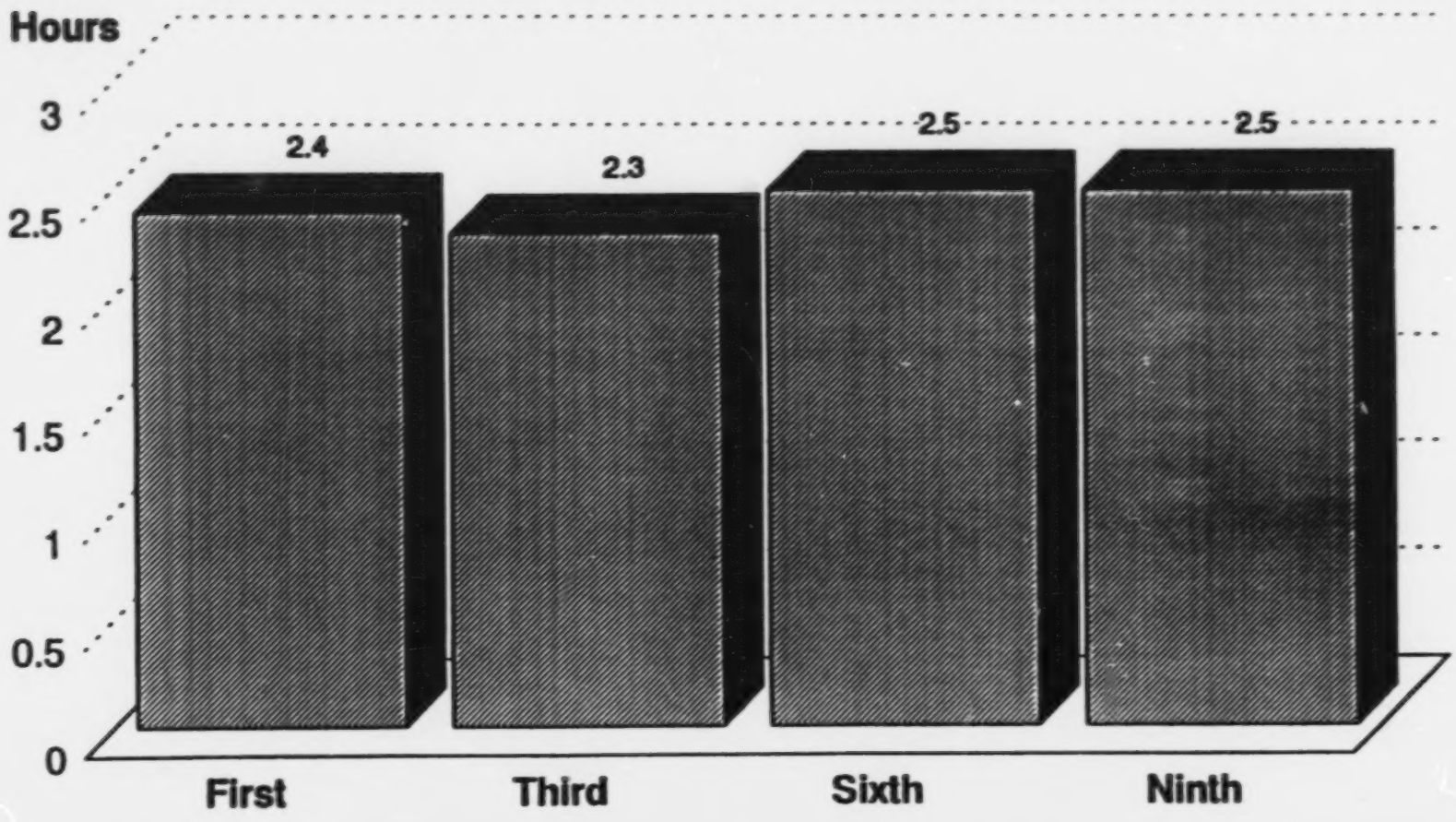


Average Number of Days per Week that Student Exercises with Each Parent by Grade



Television Viewing on SCHOOLDAYS

Average Number of Hours Per Day by Grade

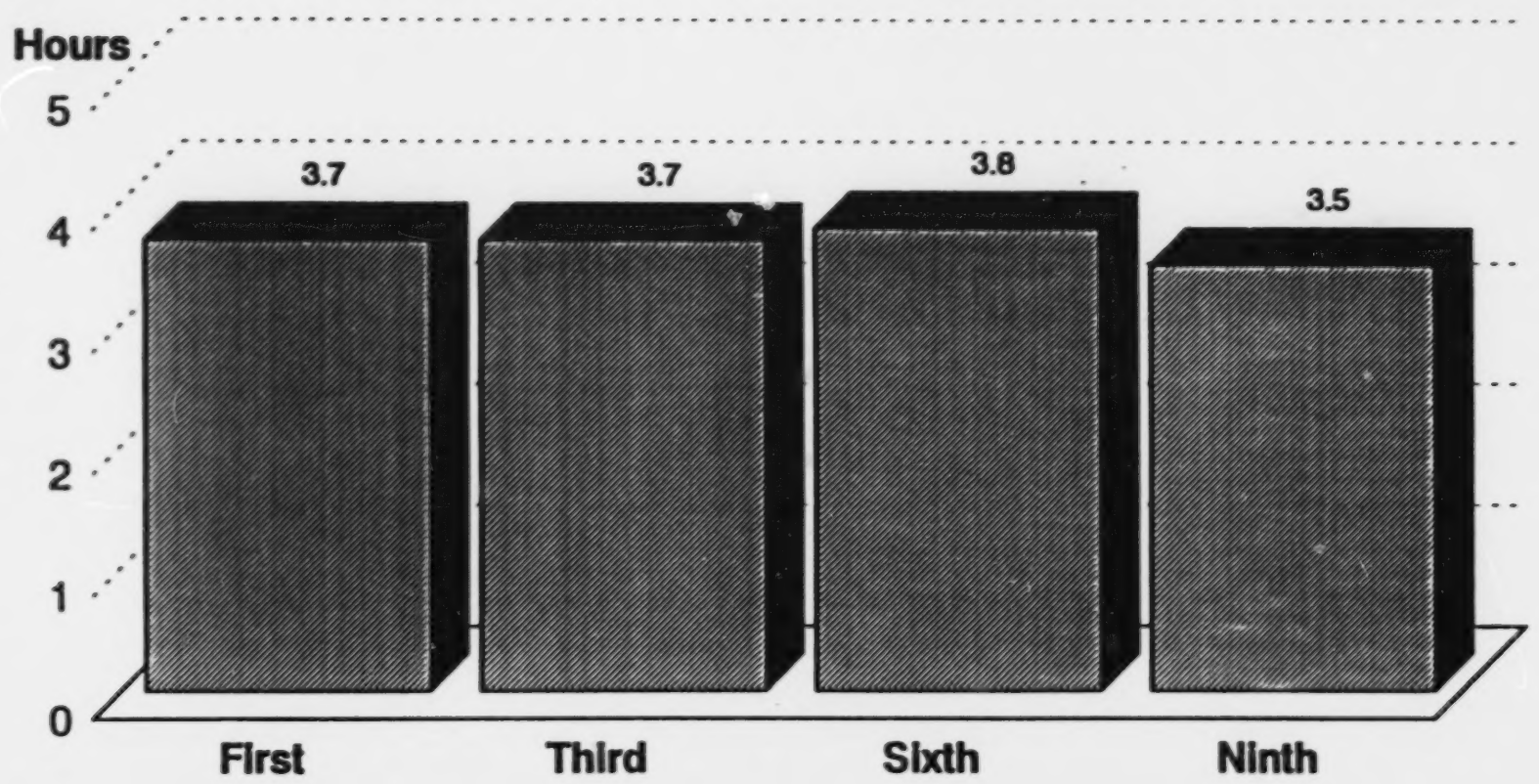


96

97

Television Viewing on WEEKENDS

Average Number of Hours Per Day by Grade



G-25

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1992

D

92d-RY-050
THIS IS A DRAFT 30-DEC-92 09:27:15

S

Short Title: Physical Fitness Study. (Public)

Sponsors:

Referred to:

A BILL TO BE ENTITLED

AN ACT TO REAUTHORIZE THE LEGISLATIVE RESEARCH COMMISSION TO STUDY THE ISSUE OF PHYSICAL FITNESS AMONG NORTH CAROLINA YOUTH.

Whereas, the Legislative Research Commission was authorized by the 1991 General Assembly to study physical fitness among North Carolina youth; and

Whereas, the Committee found from recent studies that the physical fitness levels of North Carolina youth is equally poor and in many instances worse than the national average; and

Whereas, the current Committee needs more time to investigate the state of North Carolina physical education programs; Now, therefore,

The General Assembly of North Carolina enacts:

Section 1. The Legislative Research Commission may study the issue of physical fitness among North Carolina's youth. In conducting its study, the Commission shall investigate the availability and utilization of programs to improve fitness and make recommendations about the most efficient and effective methods for improving youth physical fitness.

APPENDIX I

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1993

H or S D

93-LE-033(12.15)
(THIS IS A DRAFT AND NOT READY FOR INTRODUCTION)

Short Title: Maximum Class Size/Phys. Ed. (Public)

Sponsors:

Referred to:

A BILL TO BE ENTITLED

AN ACT TO PROHIBIT THE STATE BOARD OF EDUCATION FROM SETTING HIGHER CLASS SIZE MAXIMUMS FOR PHYSICAL EDUCATION CLASSES.

The General Assembly of North Carolina enacts:

Section 1. G.S. 115C-301(e) reads as rewritten:

"(e) Alternative Maximum Class Sizes. -- The State Board of Education, in its discretion, may set higher maximum class sizes and daily teaching loads for classes in ~~music, physical education,~~ music and other similar subjects, so long as the effectiveness of the instructional programs in those areas is not thereby impaired."

Sec. 2. This act is effective upon ratification and applies to class sizes for all school years beginning with the 1993-94 school year.

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1993

H D

93-LE-034(12.15)
(THIS IS A DRAFT AND NOT READY FOR INTRODUCTION)

Short Title: Phys. Fitness Pilot Program. (Public)

Sponsors:

Referred to:

A BILL TO BE ENTITLED

AN ACT TO APPROPRIATE FUNDS FOR A PILOT PROGRAM TO ENCOURAGE A COMMUNITY/SCHOOL LINKED PHYSICAL FITNESS AND HEALTHFUL LIVING PILOT PROGRAM.

The General Assembly of North Carolina enacts:

Section 1. (a) There is appropriated from the General Fund to Department of Public Education, Department of Public Instruction, the sum of two hundred fifty thousand dollars ($250,000) for the 1993-94 fiscal year to provide one-year grants for local school administrative units to plan and implement comprehensive model community/school linked physical fitness and healthful living programs. These pilot programs shall promote school and community-based healthful living demonstrations for children and their families.

(b) The Superintendent of Public Instruction shall administer the grant program, provide technical assistance to grant applicants and recipients, select grant recipients, evaluate the pilot programs, and develop guidelines for implementing successful programs. Pilot programs shall be evenly distributed geographically throughout the State and shall include local school administrative units of different sizes.

(c) Grant proposals shall include:

WAKE COUNTY PUBLIC SCHOOL SYSTEM
ALCOHOL AND DRUG DEFENSE

December 28, 1992

Representative Bertha Holt
N.C. General Assembly
State Legislative Building
Raleigh, N.C. 27611

Dear Representative Holt:

I would like to take this opportunity to thank you for your efforts to strengthen physical education in North Carolina. As you have heard from Dr. Angela Lumpkin, and Dr. Dave Gardner, we cannot delay this effort any longer. We are endangering the lives of our young people, and they are our future!

As I reviewed the minutes from the October meeting, I was pleased to note that the issues of "required" physical education and "no waivers" were included. One very important issue that was **not** included was the issue of qualified central office supervision of the physical education program. This issue was of such significance in health education, that special grants were made available to LEA's across the state with specifics about qualifications of the Health Coordinator position. As you begin to develop the position paper for the legislature, please understand what is happening in physical education **now**. A central level supervisor is more often than not, given more than one area to supervise such as athletics along with K-12 physical education. In one LEA, the supervisor was responsible for health, physical education, Alcohol and Drug Defense, **and** arts education. If physical education is to be properly supported by your efforts, please include a tenth recommendation to those proposed by Dr. Gardner. This recommendation should require that a qualified physical educator with a Master's Degree oversee the physical education curriculum at the central office level with the stipulation that this position **not** become a dual supervisory role. Dr. Lumpkin has a superior Physical Education Department at North Carolina State University. She is extremely qualified and has the role of Department Chair as her sole responsibility. Additional

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content areas would lessen the amount of quality time she has to supervise her staff, and provide curriculum and staff development. A strong program **must** have a strong leader!

As in this example from higher education, we must provide quality physical education to the students of North Carolina, which necessitates having a qualified curriculum specialist to provide the latest curriculum initiatives, appropriate staff development and innovative classroom teaching techniques for teachers. As we move to site based management, a strong, safe curriculum must be provided keeping in mind that individual principals cannot be specialists in all areas.

Thank you for the opportunity to "sit in" on the LRC meetings and especially the opportunity to express my personal concerns. I would be happy to assist you in any way.

Sincerely,

Frances K. Mitchell

Frances K. Mitchell

c: Dr. Dave Gardner
Dr. Angela Lumpkin
Dr. Ned Yellig